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TAMPERE UNIVERSITY OF TECHNOLOGY

MINTTU-NELLI ULMANEN

PLANNING A GLOBAL DEALER PRICING PROCESS IN A BUSINESS-TO-BUSINESS COMPANY

Master of Science Thesis

Examiner: Associate Professor
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ABSTRACT

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Pricing processes have not been studied to a large extent in recent academic literature. The researches especially seem to lack empirical views, which integrate tactic planning actions to strategic results, such as profitability. This master's thesis introduces a tentative framework of planning a global pricing process. The tentative framework was built by relying on global pricing process literature by adopting aspects from the theory of management control systems. The tentative framework suggests that a company's cost controls drive the finance department's profitability monitoring objective whereas competitive condition and customer value drive the price elasticity objective of the sales department. This settling causes a contradiction between the work of these two departments, which is why pricing process implementation should be done by compromising those.

The primary research question of the thesis is: *what type of a global pricing process would suit the case company and how should it be implemented in practice?* The research aims to make a comprehensive analysis of the current stage of the pricing process in a case company and to recognize objectives to improve. The research was conducted with an interventionistic strategy, in which both, quantitative and qualitative analyses, had an equal emphasis. The case company represents an industrial product manufacturer.

The empirical results show that in a case where the pricing is not in the focus of change, instead of price elasticity, the sales department appears to be more interested in supportive actions that an enhanced pricing process could provide for their daily work. Therefore, differing from the previous academic literatures, first, this master's thesis provides a model along with an action plan and a responsibility form, according to which the top management, sales directors and coordinators can share daily responsibilities within a hierarchically organized pricing process. Second, it presents key ratios with a technical implementation plan, which not only helps to monitor profitability at the top management level, but also provides crucial information to the entire sales department when it comes to strategic decision-making in the dealer interface. These practices were presented to retain the sales motivation of the sales department while still maintaining certain profitability level at the case company, which is something that the previous academic literature has not done in the field of global business-to-business pricing processes.

TIIVISTELMÄ

MINTTU-NELLI ULMANEN: Globaalin jakelijahinnoitteluprosessin suunnittelu business-to-business yrityksessä
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Globaaleita hinnoitteluprosesseja ei ole tutkittu kovin laajasti akateemisessa kirjallisuudessa viime vuosina. Vain harvoissa empiirisissä tutkimuksissa on käsitelty hinnoitteluprosesseja, jotka yhdistävät yrityksen taktiset toiminnot strategisiin tuloksiin, kuten kannattavuuteen. Diplomityö esittelee tentatiivisen viitekehyksen, jonka avulla globaali hinnoitteluprosessi voidaan suunnitella business-to-business yritykselle. Kyseinen viitekehys nojaa hinnoitteluprosessin kirjallisuuteen omaksuen näkökulmia johdon ohjausjärjestelmien teoriasta. Viitekehyksen mukaan yrityksen taloustiimin kannattavuuden seurantatavoite on peräisin kiinnostuksesta kustannuskontrollia kohtaan, kun taas myyntitiimin tavoite hinnoittelujoustosta on peräisin koetusta kilpailutilanteesta ja asiakasarvosta markkinoilla. Tällainen asettelu yrityksen sisällä johtaa ristiriitaan tiimien töiden välillä, minkä takia hinnoitteluprosessia suunnitellessa tulisi tehdä kompromissi näiden välillä.

Diplomityön päätutkimuskysymys on: *millainen globaali hinnoitteluprosessi sopii kohdeyritykselle ja miten se pitäisi toteuttaa käytännössä?* Diplomityön tarkoituksena on siis tehdä nykytila-analyysi kohdeyrityksen hinnoitteluprosessista sekä tunnistaa hinnoitteluprosessiin liittyviä parannuskohteita. Tutkimus on toteutettu kohdeyrityksessä interventionistisella strategialla, jossa sekä kvantitatiivinen, että kvalitatiivinen data ovat yhtä suuressa roolissa. Kohdeyritys edustaa teollista tuotevalmistajaa.

Työn empiiriset tulokset osoittivat, että myyntitiimin ensisijainen tavoite hinnoitteluprosessissa on hintajouston sijaan päivittäisen tuen saaminen silloin, kun hinnoittelua itsessään ei ole tarkoitus muuttaa. Toisin kuin aiemmissa akateemisissa tutkimuksissa tässä diplomityössä hinnoitteluprosessin tukena esitetään toimintaohje ja vastuunjakotyökalu, jonka avulla yrityksen johdon, myyntitiimin ja asiakaspalvelukoordinaattoreiden päivittäiset vastuut voidaan määrittää. Toiseksi tämä diplomityö tarjoaa hinnoittelun ja kannattavuuden seurantaan liittyviä tunnuslukuja teknisen implementointisuunnitelman saattelemana. Esitettävät työkalut voidaan nähdä myynnin toimintaa tukevana, sillä ne paitsi selventävät päivittäistä työntekoa, mutta myös parantavat strategista päätöksentekoa jakelijarajapinnassa. Näillä käytännöillä myyntimotivaation esitettiin säilyvän, mitä ei ole globaalissa *business-to-business* hinnoitteluprosessikirjallisuudessa tuotu esille aiemmin.

PREFACE

The time spent with this master's thesis has been amazing. I am really lucky to have had this opportunity from the case company and I can honestly say I was enjoying my time while carrying out this research. The biggest thanks belong to the CFO of the case company, who regularly pushed the project further with me and who did a wonderful job with supervising the thesis while providing interesting insights to the subject with realistic goals in mind. I got the best possible support from you for my thesis.

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Minttu-Nelli Ulmanen

CONTENTS

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1. INTRODUCTION

1.1 Global Pricing Management in the Case Company

Pricing as a field has not been studied that comprehensively in academic literature, because less than 2% of the marketing literature have focused on pricing related subjects (Malhotra 1996). Not surprised by the following fact, Shim and Sudit (1995) studied that only 18% of manufacturing companies utilize market-based pricing. When in turn 80% of the manufacturing companies use cost-based pricing. It might be, that the little interest paid on market-related topics on pricing tell of little interest paid on pricing process, which also commits operators from the market. In fact, according to Monroe and Cox (2001), only 8% of companies practice pricing related research. Later on, Bois et al. presented that 3% companies conduct pricing execution management (Hwang et al. 2009: Bois et al. 2005). So, the numbers implicate that the pricing management is something that the companies should pay attention to, but usually do not do it as a priority.

According to (Kotler and Keller 2012, p. 47) pricing is included in the 4P (product, pricing, place and promotion) marketing mix, which is probably most widely used framework in marketing literature. In the 21st century, along with the product marketing mix, a range of technology marketing mixes started to emerge in marketing literature (see e.g. Dovleac and Bălăşescu 2012, Chiesa and Frattini 2011 and Page et al. 2015). In those also, pricing has kept its place as one of the key elements. So, pricing management as a research field has not become outdated but has rather kept its place as an interesting research topic throughout the decades. This master's thesis focuses on studying the pricing from the pricing implementation point of view. Next, the case of this master's thesis will be discussed briefly along with the literature that relies on.

The case company is an industrial product manufacturer, which sells several products at global market. The case company has delivered its products to 70 countries by over 200 intermediaries and currently, aims for substantial growth with its two products, which are under deeper examination in this master's thesis. With the goal for growth in mind, pricing management has arisen as a meaningful topic in terms of profitability and sales department supporting actions. Consequently, the need for this kind of research arose, as the growing sales department will assumingly create pressure to the finance department's side to get more price elasticity in their work, whereas the finance department has to maintain the desired profitability level determined by top management of the company.

From the accounting point of view pricing is a significant effector in the company's profitability, as a 1% increase in price can lead up to around 10% increase in profitability (Marn and Rosiello 1992). Therefore, this research alleviates the pressure to decrease the prices, even though the sales and finance departments have different objectives (Hinterhuber 2004).

As important as maintaining the profitability is the growing sales department's need for a supportive pricing process, which not only unifies the practices within the department, but also makes the work more efficient and utilizable when new colleagues join the team. Su et al. (2015) argue that these kinds of controls are highly used in the companies that are in the growth stage, because those companies usually have higher perception of innovations and they experience a higher uncertainty in their business. As the revenues usually scale up the operations of the companies, it is easier to begin the pricing research in the early phases of growth. The early growth phase of the case company also explains the need for an improved pricing process: when there exists a commonly agreed process for pricing, it is easier to bring on new sales personnel and thus control and maintain profitability in the long-term.

As the case company already has a viable pricing policy, what follows is that the implementation of the pricing is the core interest of this case. When implementing pricing, the employers need controls: if desiring to reach profitable results, certain actions are needed. Hereby, the theory of management control systems (MCS's) will be reviewed and utilized along the pricing process theorem. Merchant's and Van der Stede's (2007) results and action controls fulfilled by Malmi's and Brown's (2008) definitions on controls provide a comprehensive framework to not only monitor the profitability, but also to support the work of sales department. More accurate description of the objectives of the research will be introduced in Section 1.2.

1.2 Objective of the Research and Research Methodology

The case company has multiplied itself over the past few years and the growth rate is expected to increase enormously in the years to come. The case company is obviously in a strong growth stage. A strong growth also creates pressure of keeping the profitability level high. As stated in Section 1.1, a relatively small change in the price can affect profitability magnificently. As, Su et al. (2015) suggest in their research that growth companies use MCS's efficiently in their daily operations. This is why the pricing process will be analyzed through the MCS's perspective in this research.

The primary research question of this master's thesis is to determine…

...what type of a global pricing process would suit the case company and how should it be implemented in practice?

More specifically this means establishing a model, by which discounts can be approved in various global cases in B2B market. Nevertheless, the analyses call for a fundamental clarification of the current pricing condition. Therefore, the secondary research questions in this thesis are *how the products of the company have been priced and what are the major lacks in the current pricing model*. To conclude, the main objective of this research is to present a global pricing process model for the case company along with an action list to implement a monitoring tool. More importantly, even though the topic of the master's thesis is strongly finance driven, the research will examine the operations of the sales department and therefore, the limitation of the observations will be made to their actions.

The literature review of this master's thesis was carried out by referring to management journals and books concerning pricing and MCS's. The literature was searched by using the presented key words in the abstract and mirroring the research question into the content of the literature. Also, the proceeding of the literature review was monitored by the supervisor of the master's thesis. Thus, the reliability of the literature was checked and sustained throughout the research process. The facts presented in the literature review were also verified by triangulation of different authors and angles of the pricing process and MCS's, which ensures the validity of the research. The literature review was carried out as a foundation to the empirical section of the research.

The empirical research methodology in this master's thesis followed interventionist approach. Interventionist approach (Suomala and Lyly-Yrjänäinen 2012, p. 9: Jönssön and Lukka 2007) sets the researcher in a position where she or he functions as a facilitator for change. The change is a desired goal, that the researcher accelerates with hers or his research. Especially in the type of research where the objective is to re-engineer an action in the case company, the research is called strong intervention (Suomala and Lyly-Yrjänäinen 2012, p. 17: Jönssön and Lukka 2007). This master's thesis follows strong interventionist approach, as the aim is to provide a redesigned model for global pricing process.

Usually interviews and observations are used as the primary data gathering methods in empirical research (Suomala and Lyly-Yrjänäinen 2012, p. 9: Jönssön and Lukka 2007). Both are also used in the interventionist approach, but rather than refraining from participation to them, the researcher recognizes her part in the research. Thus, the subjectivity and objectivity of the research have been analyzed respectively. The qualitative data gathering in this master's thesis was done by five semi-structured interviews, regular fortnight meetings with the top management of the company, as well as unintentional discussions

through other project meetings or discussions, which represent the observations. The interventionist research methodology was monitored with a research diary (Appendix E), which helped to analyze the research process more objectively afterwards.

The quantitative data gathering then consisted of the sales order data acquired from the company's CRM system, which helped to calculate the historical pricing realization. Overall, the sales order data consisted of 9724 observations from the sales order data with 12 different variables of the sales order. Therefore the master's thesis uses both qualitative and quantitative data sources. To be more precise, the quantitative data functioned as a basis for qualitative data, because it guided the decisions when choosing the interviewees. Consequently, the master's thesis followed pragmatic decision making in the proceeding (Saunders et al. 2009, p. 270)

1.3 Structure of the Master's Thesis

The structure of the thesis is organized by dichotomy of literature review and empirical review. First, Section 2.1 will first present an empirical overview of global pricing process overall during the past decades and then the limitations and challenges related to it. Thus, Section 2.1 functions in a way as initial information for this pricing process research.

Second, Section 2.2 will introduce the pricing process formation step by step by reflecting Hinterhuber's (2004) pricing process as a base theorem. In Section 2.3, MCS's are being presented by delimiting the controls to the ones that refer to pricing process. In MCS's package, the theorem is formed through the researches of Merchant and Van der Stede (2007) as well as Malmi and Brown (2008) by combining the controls that are linked to each other. After presenting the definitions of both, pricing process and MCS's package, the synthesis of the two will be built by reflecting the empirical pricing process to MCS's theories. This will be presented in Section 2.4.

Thirdly, in Section 3, the methodology of the empirical research will be presented. More specifically, 3.1 will present the methodological choices, Section 3.2 will present the research process description chronologically and Section 3.3 will introduce the gathered data in the empirical process. Fourthly, Section 4.1 will present the empirical findings of the research by presenting the analysis based on Section 3 and the literature review as a whole. After that, Section 4.2 will continue with presenting a new, enhanced pricing process model. In 4.2 an action list of implementing the pricing process will be introduced beside the pricing process model. Finally, Sections 5 and 6 will introduce the discussions and conclusions based on the reflection of the literature and the empirical research.

2. MANAGING GLOBAL PRICING IN BUSINESS-TO-BUSINESS COMPANY

2.1 Principles of Global Pricing Management

Despite the fact that only few companies cultivate some pricing research, it is a widely studied subject in academic literature. There, *the dichotomy in pricing determination realizes through marketing and economic perspectives* (Skouras et al. 2005). The perspectives approach pricing from different angles.

The marketing literature tends to examine pricing practically from the customers' behavioural point of view. Whereas economical literature fulfils the picture by company's internal accounting aspects. In other words, the literature in economics is more focused on finding a price that improves the profit level of the company. (Skouras et al. 2005) In this master's thesis, the focus is on both marketing and financial perspectives when discussing pricing.

Little interest has been paid to joint consideration of marketing and economical points of view in pricing (Wihinen 2012, pp. 26-31), but when joint analysis is carried out, scholars tend to lack substantial results by providing quite wide frameworks for setting the price (Wihinen 2012, p. 27). This is a consequence of the fact that pricing refers to the dynamics of the company's costs, market and competition. For instance, Kotler and Keller (2012, pp. 147-148, 633) argued that the *optimal price of a product should be set in-between the total customer value and total costs of the product. The price level of a competitors' product, then, may give a sign of where to set the price*. However, their framework still lacks more accurate quantitative implications. What is good in Kotler's and Keller's (2012, pp. 147-148) framework is that it consists of the segmentation, costing as well as competition. When studying global pricing management, none of the three aspects should be overlooked (Skouras et al. 2005).

The reason for studying marketing and economic perspectives together is that especially in global market, there is no single homogeneous segment. Instead, *global market consists of several heterogeneous segments with different behavioural actors* (Skouras et al. 2005), including customers and competitors. If simply following the economic approach, setting the price is seen as a constant in every segment. As a consequence, some segments might be lost due to overpricing. At the same time, with a single price level, the segments that could be willing to pay more, will buy the product with too low a price. This results in profits being left on the table. The idea of the previous is shown on the left in Figure

1. (Klompmaker et al. 2003, Wihinen 2012, p. 26)

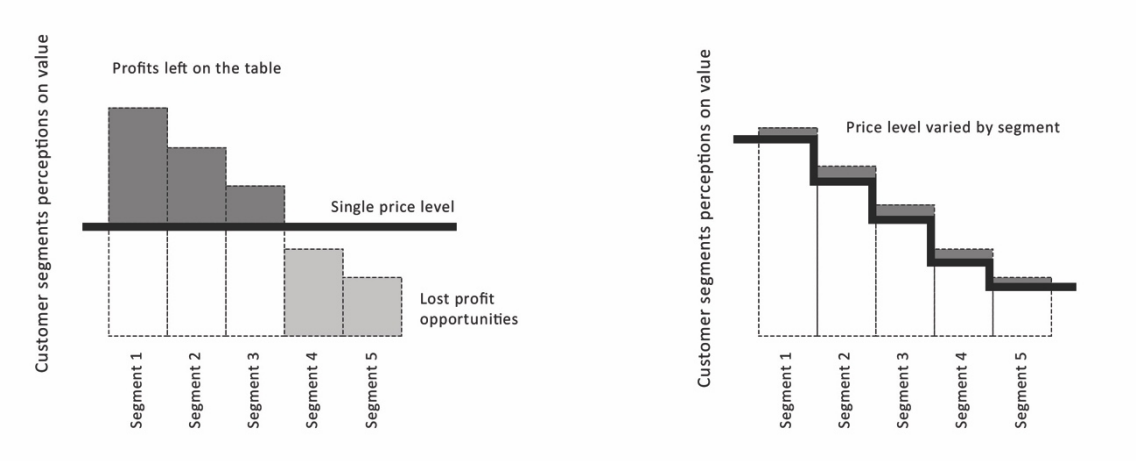

Figure 1. *Each segment considers the value differently, which leads to different pricing levels by different segment (modified from Wihinen (2012, p. 28)).*

Instead of setting one price level for each segment as per economic approach, the price level could be fixed for each segment and bigger profits can be captured. This is illustrated on the right side of Figure 1. *So, the decision-making should be made on the basis of both, cost accounting and market information.* (Klompmaker et al. 2003, Wihinen 2012, p. 26) Even though the cost calculations remain as constant for the product, the considered value for the customer does not. The idea of the cost calculations is to provide a bottom line for the price, whereas the market and the competitive environment determine where the final price should be set (Kotler and Keller 2012, p. 417). The fact of having different price levels is caused by customer behaviour, which varies in different geographical markets (Skouras et al. 2005). The value considered by the different customers are as well defined as the cost-structure of the product (Hinterhuber 2004).

As a conclusion, even though one well-executed pricing strategy in a single segment can yield great results, it might be a blunder in another (Hinterhuber 2004). Having different value considerations in the global market, the company faces real limitations and challenges in global pricing management. Before proceeding to the limitations and challenges however, it is relevant to present what has been actually studied from the pricing processes in empirical field of literature.

2.1.1 Review of Global Pricing Management

In the last Section 2.1, the marketing and economic approaches to pricing were reviewed. Furthermore, some empirical research has been done also from the field of pricing management, which is the core interest in this master's thesis. According to Kienzler and Kowalkowski (2017) 7% of empirical researches on pricing strategy rely on qualitative

data. They also proved that 41% of the empirical pricing strategy literature examined pricing from a quantitative point of view. The numbers lead to assume that pricing related research has an emphasis purely on calculations, rather than on practical process implementation.

In order to understand what has already been studied empirically from the field of pricing management, a literature search on pricing was conducted. Driving through a systematic literature search by using *pricing management* and *pricing process* as key words, empirical researches on pricing were found. The abstracts of the researches were then read and analyzed through the relevancy of the research question of this master's thesis. The most matching researches were picked for deeper examination according to relevant key words. These researches were collected to Table 1, which can be seen below. The researches have been divided according to the key words, which relate to pricing management or pricing processes. Also, the data types were marked according to the empirical research data utilization. Thus, the characteristics of the research topics can be more easily analyzed.

After the key words and data utilization classification, it was interesting to also examine, whether the researches have taken into account the global perspective in pricing, which is the interest in this master's thesis as well. The type of global perspective of each research was added to Table 1 as well.

***Table 1**. Empirical research on the pricing management.*

Research	Key words	Data utilization	Global approach
Bitran and Gabriel 2003	Revenue management, **dynamic pricing**	Quantitative driven	-
Aviv and Pazgal 2005	Learning, partially observed Markov decision processes, **pricing process**, revenue management	Quantitative driven	-
Mitra 2007	Reverse logistics, remanufacturing, revenue management, **pricing model**	Quantitative driven	-
Hwang et al. 2009	Pricing execution, pricing management, **pricing process**	Qualitative driven	Segmented price points and its practices
Roll 2009	Pricing organization, top-management support, business-to-business pricing, conjoint analysis, future of pricing, **pricing process**	Qualitative driven	-
Bonnemeier et al. 2010	Capabilities, **pricing processes**, solutions, value-based pricing	Qualitative driven	Global competition affects on customer value
Melnyk et al. 2011	Tourism product, **pricing process**, process target, process behaviour chart, method of dynamic programming	Quantitative driven	-
Pantelous and Papageorgiou 2013	Non-life insurance, **pricing process**, robust stability, LMI techniques	Quantitative driven	-
Kauppinen 2014	**Pricing management**, B2B, six sigma, global enterprise, price realization, aftersales	Quantitative driven	Segmented price points
Diehl et al. 2015	Price elasticity, sport demand, market pricing, instrumental variables (IVs) estimation, **pricing management**	Quantitative driven	-
Kanai et al. 2015	Percolation, power law, price distribution, **pricing process**, price fluctuation	Quantitative driven	-
Laas et al. 2016	Insurance pricing, motor insurance, tariff criteria, customer valuation, **pricing process**	Qualitative and quantitative	-
Yeoman 2016	Revenue management, **pricing**, history	Qualitative driven	Global competition affects on customer value
Li et al. 2016	Revenue and **pricing management**, stochastic, integer programming, room pricing, overbooking and upgrading	Quantitative driven	-

Table 1 verifies that the research on pricing management and pricing processes in general have a variety of approaches. During the empirical literature search, it was noted that in

many cases, *pricing management was considered as a way to set the price between some proper limits, rather than managing the actual pricing operations within the company* (see e.g. Bitran and Gabriel 2003, Aviv and Pazgal 2005, Mitra 2007, Melnyk et al. 2011, Pantelous and Papageorgiou 2013, Diehl et al. 2015, Kanai et al. 2015). Still, many of those have included "pricing process" in their key words. What is common for all of those researches that examine the pricing process as price range settling, is that they are all quantitative data driven, rather than qualitative data driven.

Researches that have utilized qualitative data, then, have either proven some assumptions that exists among the sales managers (Bonnemeier et al. 2010, Yeoman 2016) or aimed to determine customer value at a certain market (e.g. Laas et al. 2016). Therefore, the results of qualitative data driven researches are not that easily generalized to other fields or industries. What was interesting to find out from the literature review was that there do not exist many researches on actual pricing process when it comes to qualitative data driven researches. Only Hwang's et al. (2009) research seemed to follow the theorem of pricing process in the same manner as this master's thesis considers it. Like above stated, many researches that are quantity driven are more focused on the process of pricing settlement, not the whole pricing formation process from negotiations to the invoicing end. Therefore, more research on pricing process itself is needed in terms of control and pricing operations. In other words, the pricing process as a term needs clarification, because so far it seems that it is used widely in many kinds of different research.

As a conclusion of the data utilization, it was also evidenced that qualitative data driven researches in pricing seem to focus on the global pricing actions more than quantitative data driven researches. This verifies that the quantitative data driven researches are usually focused on the internal terms of pricing and leave out the impact of external environment, which is also a characteristic of the economic literature. The researches that include global pricing aspects seem to focus on segmented pricing points and customer value consideration in different geographical areas. All in all, Hwang's et al. (2009) research on pricing process seems to be closest to the accurate research question of this master's thesis, because it not only takes into account the pricing management and processes, but also emphasized the importance of qualitative data in pricing process and global orientation. In other words, it is crucial to take into consideration all the segments in global pricing when setting the price level, but just as importantly, it is vital to create a uniformed process to handle the complex global pricing.

2.1.2 Limitations in Global Pricing Management

As stated, price differentiation within the market segments is a consequence of customers

valuing the offering differently in different geographical markets (Wihinen 2012, p. 27). The real challenges in pricing management relate to following the complex pricing policy, which might contain many different price levels. In fact, sales people usually only follow the market- (or competition) based pricing strategy or trust cost calculations to pull the prices down (Töytäri et al. 2017). In this Section, the limitations in implementing the pricing will be introduced.

According to Töytäri et al. (2017) there are individual, organizational and external barriers related to the pricing implementation. This master's thesis suggests that some of those presented barriers are more precisely limitations, because those issues are hard to change easily in a company. "Barriers" as a term, in fact, relates to an issue to be overcome, whereas there might be some unchangeable limits in implementing the pricing process, at least in the daily work of the sales professionals. The limitations (or barriers, as stated in the original source), according to Töytäri et al. (2017) are presented in the Table 2.

Table 2. *Internal and external limitations in pricing implementation (modified from Töytäri et al. (2017)).*

Limitation	Classification	Explanation
Access to customer data	External	In B2B markets the customer data is not easily found from the public forums, at least not as well as in B2C markets
Knowledge and training of pricing	Organizational	Mis-interpreted beliefs and attitudes
Organization IT-systems (especially CRM)	Organizational	The platforms of IT-systems selling would not necessarily serve the usage
Incompatible time-horizons	External	It can be even possible to change the other company's processes and policies to match the own company's
Incentive policies	Organizational	The personal incentives drive the actions of an individual → The actions of individuals manifest to actions as groups' and organization's

As is interpretable from Table 2, the limitations refer to existing tools, policies or processes. The limitations are not individual, because the individuals are the ones that can implement the changes needed to overcome challenges, even though there might occur some resistance to change first. (Töytäri et al. 2017) Probably the most crucial limitation to point out from Table 2 is that it is really hard to find customer data in B2B market

because in many countries, the company information is not public. What is more, the end customers define the market price for the product and the intermediaries will shift pricing based on their own perception of the market price. (Suomala et al. 2011, Lyly-Yrjänäinen, 2017, p. 127) So, besides the difficulty of finding information about profitable intermediaries at the market, the companies do not have access to the intermediaries' databases to see what the actual customer value of the product at end customer's side is.

The limitations themselves create challenges in global pricing process. Ideally open information of the markets is available and the price of the product can be set precisely above the company's cost calculations and to the level of considered customer value. Even though this is rarely the case, knowing the limitations of one's own company and the external market environment allows the pricing process to still be set into satisfactory frames.

2.1.3 Challenges in Global Pricing Management

The limitations in global pricing management cause challenges in implementing the pricing strategy, like previously discussed. Pfäffli and Michel (2013) presented three main challenges concerning pricing implementation. These are

- Market segmentation and determining segment specific prices
- Communicating differentiated value to customers
- Resistance among customers related to the unfairness of pricing

The first challenge is related to estimating the existing market and the present competitors. More specifically, this is an actual challenge because this would require the price information of the reference offerings (Hinterhuber 2004). Also, this would mean that the company would have to determine where the competitors are located and how dominating they are at the market. Furthermore, a market research of the customer's buying power needs to be conducted: it is no use attempting to sell the product to the market that is not even interested in buying it. However, like stated previously in Section 2.1.2, there is no easy access to customer data in B2B markets, which makes the information hard to gather. Furthermore, market researches are expensive processes to carry out (Pfäffli and Michel 2013).

The two other challenges are related to implementing and managing the pricing externally. Communicating the differentiated value to the customers is easier if the product can be tweaked according to the customer's needs, for example by adding some extra features. Thus, the customers that are willing to pay more, can have the product with additional attributes for higher price (Pfäffli and Michel 2013). However, in business-to-

business (B2B) markets, the value communication can be quite hard because the companies do not necessarily even communicate with the end customers, who are the ones that define the actual customer value after all. As a consequence, the companies operating in B2B market cannot always know what price their products are being sold to the end customers and to which markets. (Suomala et al. 2011, Lyly-Yrjänäinen 2018, p. 127). B2B companies have to determine their pricing according to their intermediaries' perception of the product's value.

Because of the varying competitive conditions in different markets, customers may feel unfair that other customers in another market could have the same offering for a lower price. This can be worked around by adding "rules" to the system. For example, by the same way as students can have discounts by showing the student card in the stores, the customers that have purchased some certain quantity of products can be given a larger discount on the product. (Pfäffli and Michel 2013) One practical way to manage the unfairness is to create global account procedure. Global accounts are considered as companies, which have number of national units globally. (Suomala et al. 2011, Lyly-Yrjänäinen 2017, pp. 198-201) This means that the company itself defines the price for the end customer and chooses the intermediary to deliver it and serve the customer. In this case, the rule in the system is that the company can itself define which companies it considers as global accounts. This way the intermediaries will not cause a global price competition and prices can be increased to the valuable end customers.

2.2 Forming a Global Pricing Process

After recognizing and identifying the limitations and challenges in forming a global pricing process, the company may start building it. For instance, Shipley and Jobber (2001) suggest a six-step framework for building a pricing process, which consist of deciding strategy role, prioritizing the pricing objectives, assessing pricing determinants, deciding pricing strategy, selecting pricing method and implementing and controlling the price. However, in this master's thesis, the framework of Hinterhuber (2004) will be used as a basis framework, because it emphasizes both marketing and economic perspectives when setting the price, or in other words, takes into account the quantitative and qualitative aspects when setting the price.

As stated above, to be able to form a pricing strategy that serves not only the customer, but also the company itself, specific steps are needed to be taken into account. According to Hinterhuber (2004) there are four steps to be implemented when forming a pricing strategy. These are

1. Defining the pricing objectives
2. Analyzing key elements of pricing decisions
3. Selecting profitable price ranges
4. Implementing the new pricing strategy

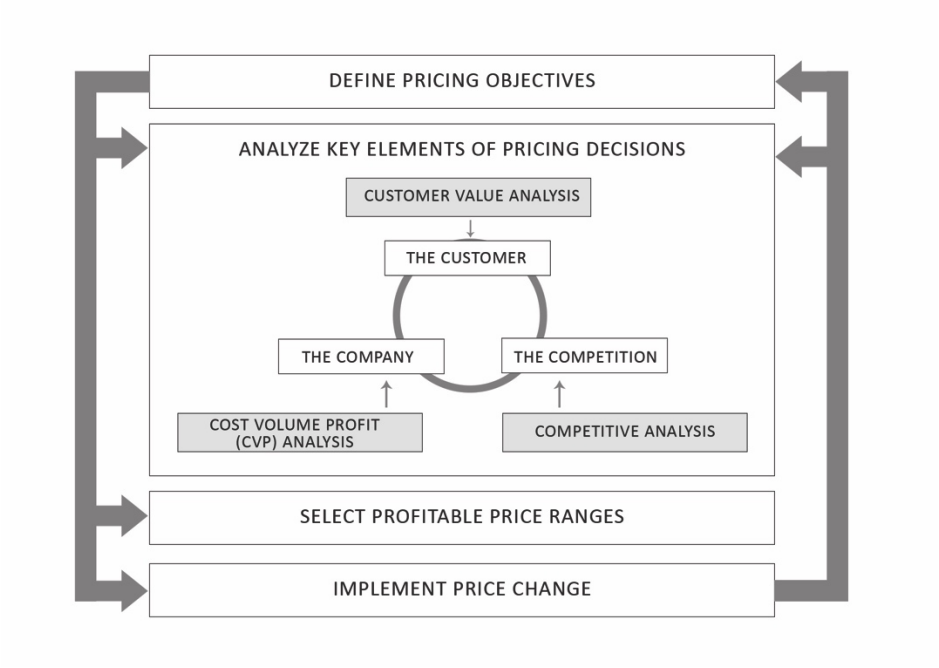

Figure 2. *Price range implementation is always dependent on the pricing objectives and key elements (modified from Hinterhuber (2004)).*

First, the pricing process itself starts by defining the pricing objects (Shipley and Jobber 2001, Hinterhuber 2004). Even though the obvious objective of the pricing process is reaching a global pricing strategy, it is crucial to remember that a sustainable global strategy might be impossible to determine as a result of a single process. This is a consequence of *country-specific marketing objectives and local, dynamic, market conditions which direct profitable pricing decisions* (Hinterhuber 2004). More specifically the objectives of pricing process may include determining appropriate market penetration pricing, attracting new customers to stores or cross-selling other more profitable products (Tellis 1986, Noble and Gruca 1999, Hinterhuber 2004). As the objectives in pricing change, the whole pricing process should be aligned according to the purpose. The ultimate objective of the pricing process then, sets sub-objectives to the company, for each separate department. Aligning these external and internal objectives will be discussed in the next Section 2.2.1.

Second, the pricing process continues by analyzing the key elements of pricing decisions. This is the most important part of the whole pricing process, because based on these calculations and analysis, the price range will be decided and implemented. *The key elements Hinterhuber (2004) argues to be cost volume profit (CVP), competition and customer value analysis*. Firstly, according to Hinterhuber (2004): “CVP analysis should be used

to capture the company-internal perspective, competitive analysis to gain insight on trends in competitive strategies, and customer value analysis to understand sources of value for customers". Thus, CVP analysis means compromising the company's internal and economic requirements versus the market requirements altogether. Secondly, the competitive condition in each segment works out as a basis for determining the customer value. Thirdly, according to Johnson et al. (2008) the core of every business action is to analyze the customer value, because only that is what the customer is willing to pay for. However, since the research topic is about global pricing, the customer value needs to be determined in different segments (Fleischmann et al. 2004, Cross and Dixit 2005), like concluded in the Section 2.1. Next, all of these key elements will be presented briefly.

CVP analysis, more specifically, is about calculating what price range is even possible to implement from the company's profitability point of view. The CVP analysis is under company's finance department responsibility. It takes into account the company's costing aspects and on the top of that, it calculates the amount of sales that satisfy the profit targets (Smith and Nagle 1994). CVP analysis can be calculated as break-even sales for the product. Thus, according to Smith and Nagle (1994) the formula for CV analysis can be written as follows:

$$Break\ even\ sales = \frac{-\ Price\ change}{Contribution\ margin\ +Price\ change} = \frac{-\Delta P}{CM + \Delta P}$$

What results from the equation is that with low margin products the required break-even point in sales changes more dramatically than with the high profit products. So, if desiring to decrease the price of the low margin product, the required break-even sales rises rapidly. (Hinterhuber 2004) Figure 3 shows the differences with the required break-even sales when it comes to different margin levels.

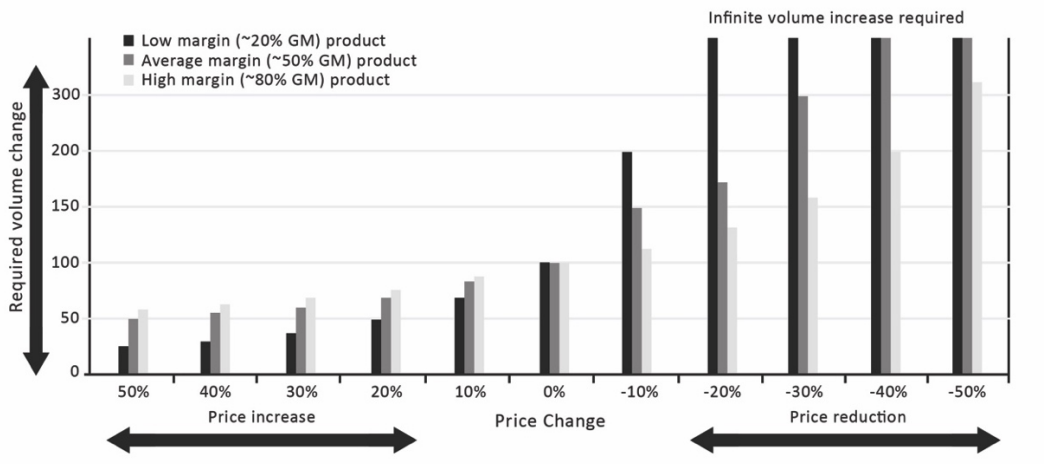

Figure 3. *The higher the margin is, the lesser impact the price reduction has for the required volume change (modified from Hinterhuber (2004)).*

In Figure 3 the products are separated to low, average and high margin products. What can be seen from Figure 3 is that the slope of low margin products booms up more rapidly in comparison to the two other margin levels (Hinterhuber 2004). Even though the illustration of required volume change represents an ideal situation in market, it is not as simple to achieve such volume changes in demand, at least what comes to increases. In order to make this kind of analysis, the information of the price change is needed. To this, the finance department requires contribution from the sales and marketing departments. So, competitive and customer value analysis fulfil the review of pricing elements by adding pressure on the price change. If no need to change the pricing exists, the CVP analysis is not necessary in the pricing process.

According to Skinner (1970) generally every company adjust their pricing according to **competition** and demand. The company's sales department has the best insight on this matter because of their continuous field work. From pricing point of view, competition addresses pressure to the required volume changes and thus, to the company's sales department's work. According to Smith and Nagle, (1994) and later confirmed by Hinterhuber (2004), established also by Serhan et al. (2015), the competitive analysis should at least answer to the following questions:

- How likely will new entrants emerge? Why would they?
- How likely will there be a new product launch? Why?
- What is the current price trend in the market?
- What are competitors' strategic strengths and weaknesses in different segments compared to ours?
- What size of market share and growth rates does the competitor have currently and what will they have in the future?
- What are the competitor's key distributors and amounts of products stored in the distribution channels?

From these questions, the company should pay the most attention to the distribution-related questions, because in the global industrial market the competitive advantage is built upon fast delivery, responsiveness and variety of high-quality products (Serhan et al. 2015). What is more, after acquiring answers for these questions, the company has quite a good understanding about the current competitive situation in each market. Competitive situation also gives guidelines to assess the customer value, because the alternative offerings have a large impact on the perceived value experienced by the customer (Woodruff 1997). Therefore, rather than carrying out a general review about the competitive situation, the company should analyze the competition per each segment.

Many scholars have been studying the **customer value** (see e.g. Woodruff 1997) and as

a result, many definitions for the customer value exist. However, it is important to separate the definition of pricing from the customer value determination, because viable pricing is a goal of the pricing process, not part of it (Forbis and Mehta 1981). Anyway, as a conclusion of the scholars' definitions, the customer value is something that the customer experiences after making the transaction. In other words, customer value is perceived by a customer and it includes not only economic but also technical, service and social benefits (Woodruff 1997: Anderson et al. 1993). However, according to Töytäri et al. (2017), it is quite challenging to acquire this kind of information, since the market related data is not easily reachable in B2B market.

As stated earlier, from the global pricing point of view it is imperative to remember that customer value in one segment does not necessarily correspond the customer value in another segment (Cross and Dixit 2005, Hinterhuber 2004). What is more, the customer value experiences derivation in B2B markets, because the end customers determine the actual value for the product, and the intermediaries will have to adapt in to it (Suomala et al. 2011, Lyly-Yrjänäinen 2017, p. 128). Either way, the basic logic of the customer value analysis remains the same. As stated above, the customer value consists of the benefits that the customer receives upon purchase. Basically the customer value could be determined as a process, as follows:

1) Determining which are the best alternative offerings and their prices i.e. **reference value** in the segment compared to own offering.
2) Analysing how to differentiate oneself from the competitors and thus, what is the **differentiation value** of the product.
3) Assessing the **customer value** of the offering according to the reference value and the differentiation value.

Thirdly, when the CVP, competitive and customer value analyses have been carried out for each segment, all the key elements of pricing have been determined. However, the pricing process is still incomplete. The next step in forming a pricing process is to select profitable price ranges. *Profitable price ranges are formed through the joint consideration of CVP, competition and customer value analysis.* Also, the price ranges should be agreed separately for each segment, especially when it is about global pricing (Forbis and Mehta, 1981, Cross and Dixit 2005, Skouras et al. 2005). Practically, the price levels will be determined together with management, sales, marketing and finance department of the company. In the end, the management has to approve the price ranges in each segment.

Fourth, at last, the pricing process itself will be implemented. The justification of the new prices in action needs to be done jointly with sales, finance and management teams and the determined key elements by each segment should be communicated downstream to

the customers. Being a process, the pricing process can be also iterated to meet the objectives and requirements of the key elements later on. (Shipley and Jobber 2001, Fleischmann et al. 2004). The objectives, key elements of the pricing and price ranges should always correspond with the implementation of the whole pricing strategy (Hinterhuber 2004). So, if any changes occur in the earlier components of the pricing, the whole implementation should be aligned to the correct purpose.

The next Sections 2.2.1 and 2.2.2 will discuss these four phases in pricing process more comprehensively and present, how they are integrated to each other. Section 2.2.1 will shed light on how the company's external and internal objectives affect the key elements. In other words, how the ultimate objective of the pricing process can be turned in to a joint objective, even though there exist different sub-objectives for each department when it comes to pricing. Section 2.2.2 will then discuss the setting of the price in case of high margin products, because this aspect is crucial from empirical point of view later on in this master's thesis.

2.2.1 Compromising the Key Elements and Pricing Objectives

Like mentioned earlier, pricing objectives may vary from market penetration pricing to cross-selling other more profitable products (Tellis 1986, Noble Gruca 1999, Hinterhuber 2004). The objectives within the company internally, however, are not always the same between the different departments, even though they would ultimately aim to the same pricing related objective. When forming a pricing process, the ultimate goal of the pricing has to be determined clearly. To reach this goal, the sub objectives then require tweaking and compromise. This Section will conclude, what kind of contradictions emerge when the different objectives of the company meet the determination of key elements.

According to pricing literature, it could be generalized that the finance people tend to be interested in how *high* the margins should be in order to cover the costs and the sales people, on the contrary, are interested in knowing how *low* the margins could be so that they can persuade customers (Smith and Nagle 1994). This is because the higher the margins are, the safer the forecasting and budgeting of the operations of the company are (Spaller 2006). On the other hand, the lower the margins are, the more easily the sales people think to achieve sales. On top of these, the top management of the company is interested in *profitability* (Smith and Nagle 1994, Skouras et al. 2005), which in practice, means an optimization of the two previously presented objectives. Figure 4 shows the linkage between the objectives and key elements of pricing decision flowing from the top management to the optimization of pricing implementation.

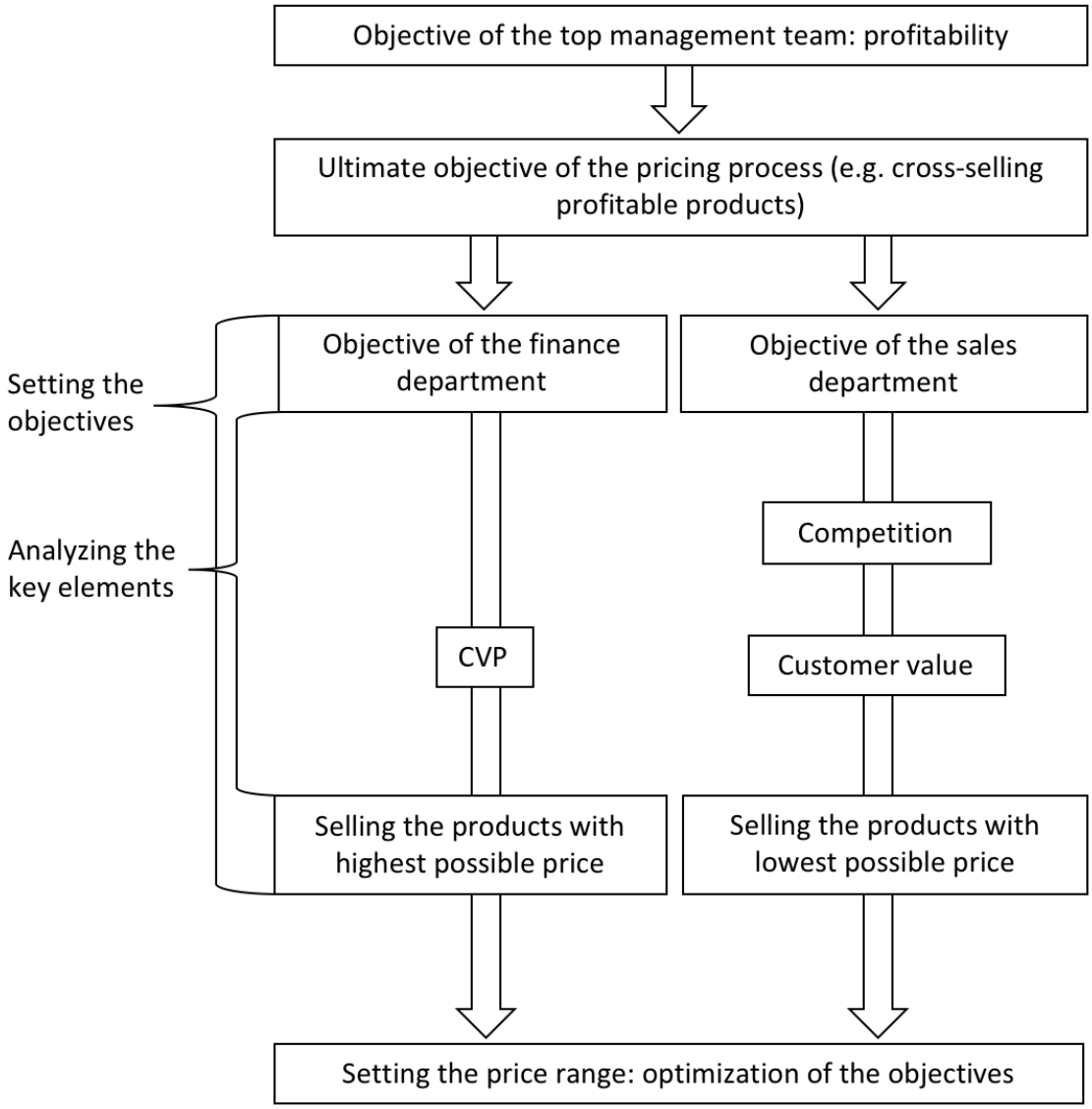

Figure 4. Department-specific pricing objectives generate through the key elements.

So, the different objectives within the company are generally recognized to be cost-, customer and profit driven objectives (Smith and Nagle 1994). According to Figure 4, it could be claimed that it depends on the case, how the different objectives within department are emphasized. However, it is generally expected that finance department is interested in keeping the margins high, whereas the sales department desires low prices for the products. In the end, it is an advantage that different departments focus their interest on different issues, because they provide fulfilling aspects on the pricing, thus addressing pressure for finding a compromised solution for internal and external pricing concerns. The next paragraphs will present more accurately the pricing objectives of sales and finance departments.

As Figure 4 shows, the company's top management dictates the ultimate goal of the pricing process. The top management is placed highest in Figure 4, because profitability is

the highest goal of the company, among other objectives that the top management is interested in following. So, the ultimate goal of the pricing process is to drive the profitability goal, no matter what the pricing process itself aims to achieve.

Anyway, finance department's core focus in pricing is on the highest possible profits to cover the costs. This originates from the fact that the fixed costs, as well as the direct costs should be covered by the sales of the product. From the finance point of view this is considered as a really important objective, because operational manager of the company performs according to the forecasted costs. (Spaller 2006) *So, the company's daily operations are dependent on the financial calculations, which causes a real pressure on finance department also from the profitability point of view.* According to forecasted costs, the company will form proper budget for its operations in the short- and long-term (Suomala et al. 2011, Lyly-Yrjänäinen 2017, pp. 86-116).

From the cost calculations, the CVP analysis can be built. So, the CVP tells, in which frame conditions the price change is possible to implement (Smith and Nagle 1994). CVP analysis represents the top of the iceberg of the whole financial department's cost calculations, because it is built upon many other calculations and assumptions, such as burden rates and operating hours (Smith and Nagle 1994). However, the marketing and sales departments will also address their own concerns to CVP analysis discussion, because they have the knowledge about the competition and customer value (Hinterhuber 2004).

The marketing and sales departments' pricing objectives are totally opposite compared to the finance department's objectives, as they usually aim to provide the lowest possible price for the customer (Smith and Nagle 1994). Interestingly, even though the marketing and sales people think that the price is one of the most important factors when making the purchase decision, it really is not: according to Reichard (1985) from the purchasers point of view, *the emphasis on the purchase decision relies on the different attributes of the product and the comparable alternatives, rather than the price itself*. More specifically, according to Avila et al. (1993), the biggest interest on the purchase decision is on the whole service around the product. However, the customers still tend to negotiate the prices down as aggressively as they can, which might be a reason for misthinking that the price is a deal breaking factor in closing the deal (Suomala et al. 2011, Lyly-Yrjänäinen 2017, p. 128)

So, rather than selling the product for as low price as possible, it is more profitable to sell the factors that the customer considers valuable for them compared to reference offerings (Hinterhuber 2004). This is something that also Michael and Pfäffli (2013) discussed in their pricing process research from challenge point of view, like Section 2.1.3 presented.

Even though the marketing and sales people act customer driven, they should more importantly focus on analysing the market by their competitive condition and compare the value of their own offer to those.

All in all, whereas CVP analysis represents the angle of the finance department by setting the absolute price ranges for the product, customer value and competition analysis of marketing and sales departments also carry weight. On the top of that, the key elements should be compromised in a way that they still fulfil the objective of the top management of the company: profitability. From this basis, the real price level negotiations can be started internally in the company.

2.2.2 Setting the Price Range in Global Market

From the key elements analysis, the company will proceed to setting the price range in the certain market. According to Smith and Nagle (1994) and Skouras et al. (2005) the profitability objective is driven by the company's management. In the end, it is under their responsibility to implement the agreed upon pricing strategy in a way that different departments will commit to it, despite the contradicting objectives like presented in previous Section 2.2.1. This master's thesis focuses on studying high margin products, so setting and implementing the price ranges will be discussed from this point of view.

As it was earlier concluded, high margin products do not cause as high a pressure on a company's profitability as low margin products, as their higher sales volumes do not raise the overall profitability as aggressively (Hinterhuber 2004). So, in case of high margin prices, the emphasis is in managing the different objectives of the company and maintaining a certain profitability level. However, if the margins would start to fall, they would in some point, start to have an effect on the company's profitability as well.

So, in order to keep a certain price level, the company needs to do it systematically. Therefore, the pricing process implementation plays a big role in price realization. While the different objectives within the company lead the departments work for their own interest, there needs to be a controlled way to optimize the price realization towards the ultimate goal and profitability. Management control systems (MCS's) provide a tool to implement the pricing process companywide (Smith and Nagle 1994, Skouras et al. 2005). The next Section 2.3 will introduce the theorem of controls. Further on, Section 2.4 will present how the set price ranges can be implemented in terms of proper control.

2.3 Management Control Systems

In order to monitor and follow the activities related to pricing, managers have to have

practices to do so. Management control systems (MCS's) are tools to implement activities, decisions and operations of the company's employees that support the company's strategy and objectives (Malmi and Brown 2008). Many scholars have been studying MCS's for decades. According to Shimizu (2017, p. 2), MCS's are "aggregates of some systems that influence people". Similarly, Otley (1999) defined MCS's as a set of procedures and processes that not only managers, but other organizational participants use to achieve their personal and organizational goals. This definition was also supported by Merchant and Van der Stede's (2012) who argued that MCS's are process systems that help to implement a company's strategy (Shimizu 2017, p. 13).

More specifically, activities, decisions and operations of MCS's may include for instance pricing methods, costing, management practices and scorecards. Those together form an MCS's package, which is a combination of many management control systems. Therefore, when building a new process to measure, monitor or manage the company's operations in any way, it is paramount to pay attention to the entire MCS's package, which consists of different kinds of tools (Flamholtz 1996, Malmi and Brown 2008, Shimizu 2017, p. 1-5). When building a control system for an objective, it might also affect other people's work at the company.

In this master's thesis, Malmi's and Brown's (2008) as well as Merchant's and Van der Stede's (2007) literature of MCS's are being used as a basis, because those together form a detailed and well categorized perspective for MCS's package. Even though Shimizu (2017) argues for major distinctions between perceptions of these two MCS's, it is not entirely so. There are many similarities in these MCS's packages, which is why they will be used here together and classified under each other.

The four elements of MCS's package in Merchant's and Van der Stede's (2007) framework are results, action and personnel as well as cultural controls. Under these categories, Malmi and Brown (2008) had earlier determined five different types of controls. These are cultural, planning, cybernetic, rewarding and compensation and administrative controls. Next, the categories of Merchant and Van der Stede (2007) will be presented by referring them to Malmi's and Brown's (2008) perception of MCS's package.

Firstly, cultural controls refer to clans, values and symbols (Malmi and Brown 2008, Shimizu 2017, p. 7: Merchant and Van der Stede 2012, p. 85). These all are established by the behaviour of the company's employees, because they are bound together by social norms (Flamholtz 1996). Merchant and Van der Stede (Shimizu 2017, p. 14: 2012 p. 90) also verified this perception of cultural controls by stating that "*(Cultural controls) are designed to encourage mutual monitoring: powerful form of group pressure on individuals who deviate from group of norms and values"*. So, these norms and values turn into

actions that represent not only the individual, but their whole team, and later on, the whole company (Shimizu 2017, p. 7). So, the perception of cultural control is the same when comparing Malmi's and Brown's (2008) and Merchant's and Van der Stede's (2007) MCS packages. Even though cultural controls affect the company's employees' daily work, it will not be examined more deeply in this master's thesis.

Secondly, the results controls are controls that focus on the outputs of managers and employees (Merchant and Van der Stede 2007, p. 28-29). *The results controls of Merchant and Van der Stede (2007) include Malmi's and Brown's (2008) planning and cybernetic controls* (Shimizu 2017, p. 19). When it comes to planning, it starts by deciding the goals and objectives of the organization (Flamholtz 1996). According to Malmi and Brown (2008), the planning also includes making tactics to reach the actual goals, which usually means an action plan for up to a 12-month-period. Continuing from that, strategic planning is needed to draw frames for reaching the long-term goals. The long-term goals are planned to be reachable in a longer than a 12-month-period of time (Malmi and Brown 2008).

The more matured the company's business is, the more it usually pays attention to strategic planning. On the contrary, the growth companies usually tend to emphasize tactics in order to survive from the short-term ordeals. (Su et al. 2017) In this master's thesis, both strategic and tactics planning are considered respectively. More comprehensive discussion about planning will be presented in Section 2.3.1.

Cybernetic controls as a part of results controls, then, relate to the extent to which the company can achieve quantitative results (Malmi and Brown 2008, Green and Welsh 1988). Even though Shimizu (2017, p. 17) criticized that cybernetic controls are restricted to accounting perspectives, such as cost calculation and budgeting, they can be used for other purposes as well (Malmi and Brown 2008). Malmi and Brown (2008) have also defined non-financial measurements in their MCS's package as a separate entity. Also, according to them, hybrid measurement systems are counted as cybernetic controls. Those controls combine the financial and non-financial measurements. So, cybernetic controls can be used to quantify any data that exist in the company: from the satisfaction of the employees to lead time optimizations (Ittner and Larcker 2001).

Thirdly*, action controls focus on the actions taken by managers and employees (Merchant and Van der Stede 2007, pp. 76-80)*. Malmi's and Brown's (2008) reward and compensation controls can be classified under Merchant's and Van der Stede's (2007) action controls, because they direct the behaviour of the employees. Incentives are a good example of guiding the actions taken by the managers and employees, because obviously,

those are tools of rewarding and compensation (Flamholtz 1996). So, reward and compensation include the evaluation of individuals and groups on reaching the organizational objectives.

Furthermore, administrative controls mean organizational structures and processes as well as policies, which the individuals are directed to behave by (Malmi and Brown 2008). In conclusion, administrative controls can be also referred to as Merchant's and Van der Stede's (2012) action controls, because they affect the way people act as employees and in relation to others in the structured, or even hierarchical, system (Shimizu 2017, p. 14, 125, pp. 54-55). Figure 5 summarizes a framework of Merchant and Van der Stede (2007) and Malmi and Brown (2008) by combining these frameworks into one.

<table>
<tr><th colspan="2">Results controls</th></tr>
<tr><td rowspan="2">Planning</td><td>Non-financial measures</td></tr>
<tr><td>Financial measures</td></tr>
<tr><th colspan="2">Action controls</th></tr>
<tr><td>Administrative</td><td>Reward and compensation</td></tr>
</table>

Figure 5. *Management control systems package for pricing management.*

In Figure 5, two controls of Merchant and Van der Stede (2007) are not represented. These are the aforementioned cultural controls and personnel controls, which will be presented next. Fourthly, *personnel controls focus on the type of people that are employed in the company (Merchant and Van der Stede 2007, pp. 83-84*). Referring this to Malmi's and Browns (2008) MCS's package, any of the controls there do not represent this aspect directly. In fact, personnel controls could be in a way classified as action controls, because managers carry out actions when recruiting new people. However, in this master's thesis, the personnel controls are omitted from the deeper analysis. Therefore, they were not drawn to Figure 5 either. Similarly, the cultural controls are left out from the further examination.

All in all, MSC's should not be implemented in isolation of other MCS's, but rather to be reviewed with other MCS's and how those affect each other when utilized (Shimizu 2017, Su et al. 2017). For example, without results controls, there would not be action controls either. Especially in terms of reward and compensation controls, the effect of other categories in the whole MCS's package can be seen concretely. In practice, it would be im-

possible to measure and reward the performance of some individual or group if quantification system is not developed by cybernetic controls.

What is more, MSC's package as a whole, in fact, provides an opportunity to view how well the company is managed in different areas. When it comes to planning a pricing process, the focus should be on the quantitative and qualitative measures and on the actions of departments involved. In the following Sections 2.3.1 and 2.3.2 the results and action controls will be discussed in more detail.

2.3.1 Results Controls

As discussed above, the results controls include planning and cybernetic controls (Shimizu 2017, p. 14). However, in order to meet the purpose of this master's thesis, all the aspects of cybernetic controls are not needed to assessment in this study. So, the delimitation of the topics was made to short- and long-term planning, non-financial and financial measures altogether. In this Section 2.3.1, the latter mentioned topics are being discussed in more detail.

The planning starts with setting the goals for functional areas of the organization (Hinterhuber 2004, Skouras et al. 2005). *What is more, planning means achieving the goals by the standards that are in relation to that. Moreover, it unifies the companywide goals and thus helps the employees to work together cross-functionally* (Flamholtz 1996). According to Henri (2006), a good way to get started with the planning is to use resource-based view (RBV). RBV, that is, "(RBV) is based on the principle that competitiveness is a function of distinctive and valuable resources and capabilities controlled by a firm" (Henri 2006).

So, according to RBV, the company can create competitiveness by optimizing its resources. In more detail, according to Lengnick-Hall and Wolff (1999) the company's competitive advantage relies on the strength, expert exploitation and leverage of internal resources and capabilities. Therefore, planning plays a big role in MCS's package as well: company plans to set and utilize its resources in a way that it can gain competitive advantage in the markets. The resources can be classified to physical, monetary, legal, partner-relationships, organizational and human resources (Morgan and Hunt 1973).

However, the planning does not improve the company's strategy implementation if the plans are not taken in to use respectively. The actual purpose of planning is not the plan itself but rather to create plans that are possible to implement. In order to make a good plan, it has to be done jointly with all the teams involved. According to Simons (Bisbe and Otley 2004: 1995, p. 109), interactive use of MCS's help in carrying the plans to

action. This verifies that planning is something that is needed to do cross-functionally. Rarely any operations in the company are something that do not affect other teams.

Also, the shorter the time frame of the plan is, the higher the need for interactive use of MCS's is. What is more, "interactive use of control systems also trigger revised action plans" (Bisbe and Otley 2004: Simons 1995, p. 109), which means that also in the case of short-term planning, feedback is required throughout implementation. Not a coincidence, feedback loops are included in the elements of cybernetic control systems, which will be discussed next.

Cybernetic controls are examined only from financial and non-financial perspectives in this master's thesis, because the research question relates to pricing process. Malmi and Brown (2008) classified financial and non-financial measures as one of cybernetic controls, which then, are included in the results controls presented by Merchant and Van der Stede (2007). However, the most interesting concern from MCS's point of view is, how the non-financial and financial measures should be used as a part of cybernetic controls when forming a pricing process.

Cybernetic controls themselves mean controls that function according to feedback loops. *Whereas the purpose of planning is to allocate resources to gain competitive advantage (Morgan and Hunt 1973), non-financial and financial measures ensure that the resources flow in sufficient quantities, they flow for the correct purpose and also, the measuring system for them is available (Green and Welsh 1988).* So, the difference between the planning and non-financial and financial measures is that non-financial and financial measures can be more easily criticized according to their results, whereas planning cannot be judged as easily because it does not necessarily require any metrics. As stated earlier, planning means cross-functional work and interactive actions from all the teams involved in the decision-making.

Green and Welsh (1988) have provided five different characteristics for non-financial and financial measures. The first one is that there has to be some quantification of the system. For example, the company may use a certain function to calculate its investments (Wihinen 2012, p. 44). The second is that there are standards, by which the set targets can be acquired (Green and Welsh 1988). For instance, there must be a tool or even an IT system, which helps to quantificate the decision-making object and makes the data comparable. Third, a feedback process is needed to measure if the made results correspond with the expectations (Green and Welsh 1988). For this to be efficient, the feedback loops could be for example automatic feedback loops built inside the standardization. For example, if the quantification tool was an IT-system, it would alert whenever some deviat-

ing observation occurs. Fourth, the variance analysis can be built upon the feedback results and fifth, the agility of the system has to be maintained in order to modify it to the purposes of the underlying activities (Green and Welsh 1988).

The difference between non-financial and financial measures is that the financial measures are obviously measures that company's finance department maintains and aims to improve. So, financial measures usually rely on quantitative data. Non-financial measures then, can be based on either quantitative or qualitative data (Ittner and Larcker 2001). However, also non-financial measures have to be quantified as Green and Welsh (1988) have determined. One way to quantify non-financial data is to carry out an inquiry and analyze the responses according to quantitative answering alternatives (Ittner and Larcker 2001).

Non-financial and financial measures are well-organized and systematically built controls. This is because according to Ittner and Larcker (2001), the financial controls are usually driven by the requirements of decision making and the capability to monitor the results. As many non-financial and financial measures there exist, as many cybernetic controls there are also. In order to make the results controls as efficient as possible, they need other controls for support (Shimizu 2017 p. 6, Su et al. 2017). Action controls provide a different angle to MCS's package in terms of company's strategy implementation and help the employees reason the usage of the result controls.

2.3.2 Action Controls

Merchant and Van der Stede (2012) determine the action controls as procedures to control an employee's pre-actions and behaviour (pp. 81-84). According to Flamholtz (1996), by individual, organizational and external incentives the company's management can drive the actions of the employees and direct their behaviour. Summing that up, reward and compensation control presented by Malmi and Brown (2008) can be classified under Merchant's and Van der Stede's (2007) action controls. What is more, in earlier Section 2.3, action controls by Merchant and Van der Stede (2007) were referred to Malmi's and Brown's (2008) administrative controls. This is because administrative controls enforce the actions of the employees to work beneficially for the company (Shimizu 2017, p. 14). Thus, this section focuses on introducing the reward and compensation and administrative controls as a part of action controls.

While results controls focus on providing mechanisms to follow the strategy implementation, action controls focus on implementing the procedures. *In other words, action controls encourage and aim to inspire the employees to work for the company's strategy.* In

this Section 2.3.2, the reward and compensation and administrative controls will be discussed in the light of the previously presented theory of MCS's package.

If drawing the theory from cybernetic controls' point of view, reward and compensation will be achieved by the success of it (Flamholtz 1996). More precisely, if planning turns out to be carefully carried out, the non-financial and financial measures will show sufficient results and the company's management will end up rewarding and compensating the employees. The logic also functions the other way around: if one desires to achieve reward and compensation for their work, one has to act according to the established plan and to try to reach measurable results (Malmi and Brown 2008). So, while the administrative controls represent an organizational approach to carry out operations aligned with strategy (Flamholtz 1996), reward and compensation controls represent an individual approach for strategy implementation.

As stated in Section 1.1, this master's thesis delimits the pricing process research to the aspects of sales department when it comes to implementing the prices. Therefore, the action controls will also be delimited to examine those perspectives. A good example of guiding the objectives of the sales people individually is personal incentives, which can be bound for instance to the turnover and profitability of the company (Iyer et al. 2015: Simon 1955). However, on its own a turnover objective drives them to sell as much as possible, in other words, encourages them to sell the products in big volumes rather than in profitable prices. The profitability objective then, would require the sales department to also maintain a specific price level. As earlier stated in Section 2.2, profitability is the core interest of top management and is also the ultimate goal of the entire company in the long term. It is therefore something that should also be taken into account in the employee incentives. Anyway, Lancioni (2005) stated that the companies often use pricing as a way to adjust the volume rather than as a component of the profitability itself. Even though incentives is a one way to commit the sales department to maintaining the profitability, it is as important to reason the made decisions in their work. Wouters and Wilderom (2008) proved in their research that when transparency in the company is supported, the employees are more committed to utilizing the controls. As a conclusion, more attention to profitability aspects in motivation matters is generally needed.

According to Malmi and Brown (2008) administrative controls have three characteristics. Firstly, governance structure means board composition and the management project teams, which direct the operations of the daily work. Also general authorities in the company are counted as governance structure (Fong and Abernethy 1996). These structures create procedures that co-ordinate meetings, deadlines, schedules and agendas (Malmi

and Brown 2008). Second is organizational design, which means unifying the organization by its structural type (Fong and Abernethy 1996). The team boundaries have a big impact on this, because those generate the different kinds of relationships that the employees represent by the organizational structure (Malmi and Brown 2008). Thirdly, policies and procedures could be characterized as ways to implement results controls. The governance structure and organizational design, then, will enforce the usage of those. This is because policies and procedures are seen as a bureaucratic approach to business: obviously, those actions can be only enforced by the company's management and not the employees alone (Malmi and Brown 2008).

As a conclusion of the reward and compensation and administrative controls, they both create pressure for the employees to succeed in their work. In a way, administrative controls limit an individual's achievement of personal goals, whereas reward and compensation entice the employees to work for strategic goals. Especially from the perspective of the pricing related research question, different types of incentives and utilization of agreed policies are interesting aspects. In the next Section 2.4, the theories of pricing process and the MCS's package presented here will be discussed together.

2.4 Implementing Pricing Process by Management Control Systems

By this point, this master's thesis has approached the research question from two entities: process and controls. However, in order to manage and monitor the pricing process as this master's thesis considers it, these two themes have to be brought together and integrated to the same framework. Thus, a tentative framework will be built to the interface of these two. As the empirical research review pointed out, price management is usually seen as a procedure to set the profitable price range for the product. This kind of approach was also emphasized in Hinterhuber's (2004) framework of pricing process. However, his research as well lacks an accurate perspective of the pricing implementation. Thus, the literature review of pricing process was completed with the MCS's package perspectives of Merchant and Van der Stede (2007) and Malmi and Brown (2008). In this Section, the practices of these two will be integrated.

As said, the pricing process itself starts by determining the objective of the pricing process (Hinterhuber 2004, Skouras et al. 2005). Interesting is that also in the MCS's package point of view, the planning starts by setting the objectives (Flamholtz 1996). As the goal of this master's thesis is to create a pricing process which can also be monitored by the set price ranges, and as there does not exist a research on these two perspectives, price range and its implementation together, the two-phased planning framework was formed

as an outcome of the gathered literature. Hereby the two-phased planning framework represents a tentative framework, which assumes that the pricing process implementation and the MCS's package have a direct linkage to each other. The tentative framework in fact, means a framework which combines different terms and approaches related to the same topic (Suomala 2004, Danilovic and Winroth 2005). There is high uncertainty of the compliance in using the framework. Hence, in the end of the research in Section 5, criticism towards the tentative framework is presented.

So, to implement the price range that Hinterhuber (2004) suggests by the key elements, a pricing implementation has to be managed by MCS's package. In other words, in order to implement a pricing process systematically, it has to be planned according to the results controls, as stated in Section 2.3.1 (Flamholtz 1996). As a result of the two planning phases, then, a pricing process model can be drawn. So, by using results control, in this case planning, an action control, in this case a process, can be created as an outcome. This relates to an extent to the fact that one of the areas in administrative controls are processes and procedures (Malmi and Brown 2008). Thus, pricing process consist of two planning entities, which are

1) Planning a price range in global market
2) Planning the pricing implementation

By classifying the pricing process into two planning entities, the pricing process can be built more systematically: the second planning entity always aims to fulfill the objective of the price range set in the first planning entity. As Section 2.2.1 presented, the price optimization within the company starts by determining the objective of the pricing process and proceeds to assimilate the internal objectives of the different departments (Hinterhuber 2004). Thus, it could be said that both planning entities refer to some specific objective. To summarize, the planning entities create a derivation of the objectives in the pricing process: ultimately the implementation of the pricing process is not only fulfilling the agreed price range in global market, but to also fulfilling the company's objectives internally and in the end, being profitable. Next, the proceeding of these two planning entities will be presented more accurately in chronological order.

First, planning the price range in global market can either be short- or long-term planning, depending on the pricing process objective. If the company aims to, for instance, penetrate the market with a new product pricing, it is about strategic planning, because the price will be most likely implemented in a longer than 12-month-period (Flamholtz 1996). On the contrary, for instance, if the pricing process is about creating a campaign in order to, for example, empty the warehouse, it is about short-term planning (Flamholtz 1996). However, as concluded in the Section 2.2.1, the ultimate objective of the top management

is to always maintain the company's profitability (Smith and Nagle 1994). So, *whereas the pricing process objective creates a timeframe for the planning and determining the practical goal of the pricing, it must be always reasoned by profitability*. Thus, the departments of the company must be aligned to these objectives. Moreover, they have to consider how they can compromise the frame conditions that the key elements set for them while fulfilling the goal that the pricing process objective sets to them in daily work.

As presented through Hinterhuber's (2004) framework, the key elements when setting the price range are CVP analysis, customer value and competition. To the purpose of CVP analysis, the finance department carry out cost calculations, which function as a basis for calculating the contribution margin, which is a variable of CVP formula, as presented in Section 2.2.1 (Hinterhuber 2004). *Integrating this to MCS's package, CVP analysis represents financial measures in results controls.* By the CVP analysis, the finance department can also reason the price range for the sales department, because, as a result of the formula, it gives the minimum volume for selling the products, if some certain price change is implemented.

Consequently, if it is seen that the price range needs to be changed, the sales department of the company will give an impact in to the CVP analysis (Hinterhuber 2004). Thus, *they reason the price range with non-financial measures by appealing to customer value and competition analysis in different market areas*. While doing the field work, the sales department gather information from the markets about the customer value and competition, and thus, can compare the prices to reference offerings (Hinterhuber 2004). If the price is seen as a deal-breaking factor at the certain market, the departments should address the pressure on finance departments direction in order check if the prices could be decreased there. Thus, the contradicting objectives are being reasoned through all the departments involved with the pricing.

To conclude the above discussion, the financial and non-financial measures manifest as CVP analysis and customer value and competitive condition. By planning then, it can be solved, what will be the outcome of these cybernetic controls results. So, only the results controls will be used in the first planning phase. This is natural only because the second planning phase aims to implement the pricing strategy into action. Even then, the results controls will be needed.

It is not self-evident that the different objectives within a company would cause discrepancy in the company on a daily basis. Basically, the optimization or re-optimization of the objectives is always an impulse from some specific change in the key elements. In the end, the top management makes the strategic decisions about pricing. However, when founding a new company or a new product line in an existing company, the first planning

phase is a necessity in order to determine, what is the ultimate goal of the pricing process implementation in the second phase of the planning. Figure 6 structures the first planning phase by positioning the objectives in the price range optimization and integrating the financial and non-financial measures to the framework.

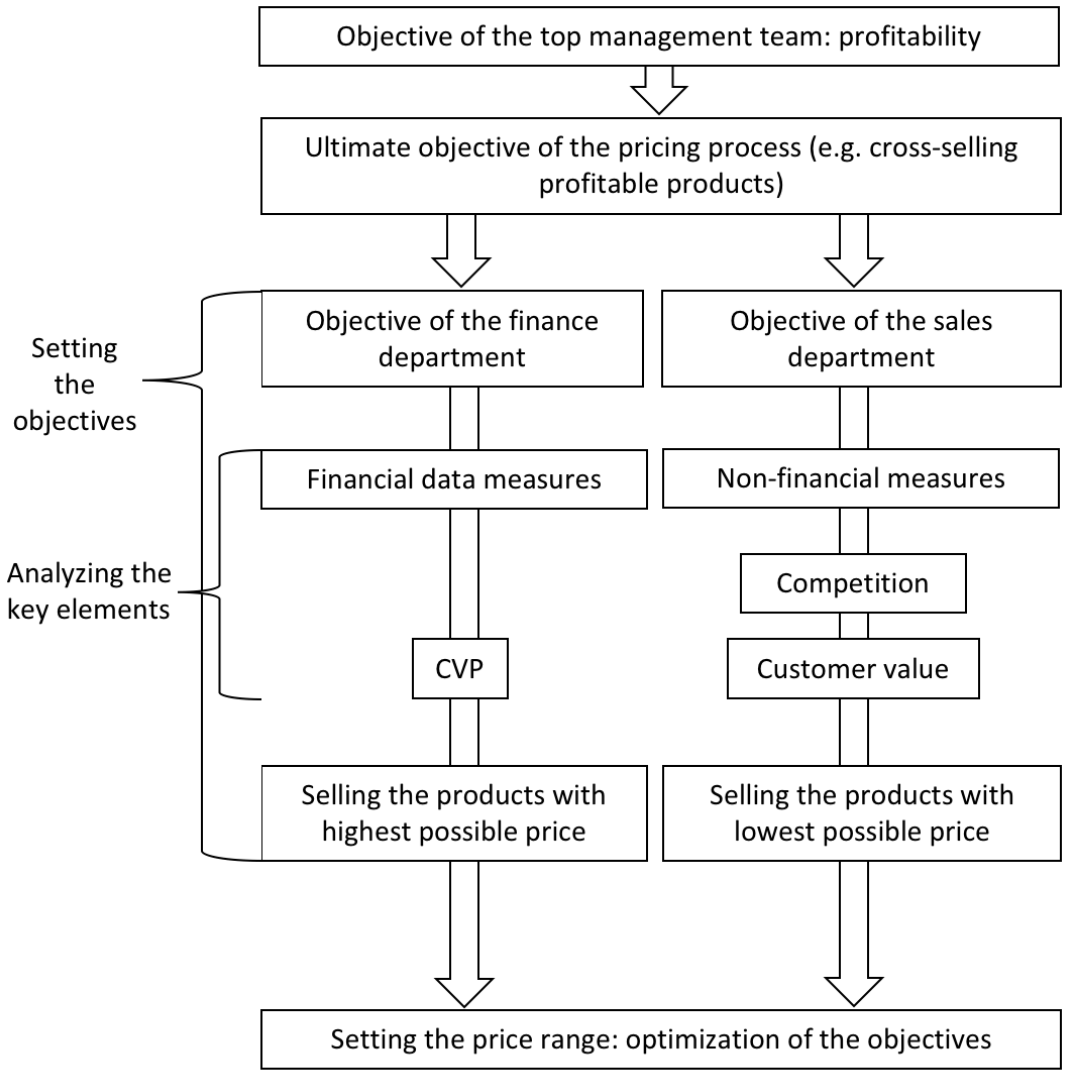

Figure 6. In the first phase of planning a pricing process, the price setting is formed through contradicting objectives within a company.

As can be interpreted from Figure 6, the price range optimization combines the areas of both, pricing process framework of Hinterhuber (2004) and MCS's package framework consisted of MCS's package for pricing built in Section 2.3 (Merchant and Van der Stede 2007). Hence, like already discussed earlier in this Section, it represents a tentative framework, which means that it combines the different terminologies of the different research fields. As Figure 6 shows, the first planning phase ends in setting the optimized price range. As a result of the first planning phase, a decision of the price range is agreed together with the finance and sales departments.

To make the agreed price range clear for each department, a pricing policy should be formed internally, so that the implementation of the pricing process can be documented and shared to other departments of the company who it might concern. Also, the pricing policy functions as a baseline of comparing the realized price later on in the pricing process, where the prices are being monitored. When this has been done, the next planning phase of the pricing process can be started.

Second, the pricing implementation will be planned. In order to keep the prices within a certain price range, a pricing process has to be formed. Whereas agreeing on the price range relies on both, financial and non-financial data, in other words cybernetic controls, the pricing implementation focuses on planning how the action controls can be used to realize the agreed price ranges. As Shimizu (2017, p. 7) stated, the action controls in MCS's package guide the operations of the employees to work according to the company's strategy. Thus, especially administrative and reward and compensation controls are being analyzed from the pricing process point of view. So, the non-financial measures in the company give signs to the company on how to set them.

As it was concluded by the empirical literature research, there does not exist much research on implementing the pricing process. From the listing of the pricing process researchers, only Hwang's et al. (2009) process approached the pricing process from the same angle as this master's thesis. So, besides the Hinterhuber's (2004) framework as well as MCS's package built on Section 2.3, Hwang's et al. (2009) pricing process will be used as a basis for forming a global pricing process. Next, the best and most corresponding practices from each of these literature entities will be integrated in to one pricing implementation model.

Hwang's et al. (2009) research presented a framework of pricing process that consisted of planning, execution and analysis separated to company's and customer's side. To this basis, Hinterhuber's (2004) framework of pricing process was set. The best practices from Hwang's et al. (2009) framework was to separate the parties in the pricing process and to have an analysis-phase in the middle of the implementation framework, to function in a way as *checkpoint* for pricing implementation. In Hinterhuber's (2004) framework, these monitoring practices are not taken in to consideration in any way, so those will be taken in to the integrated framework that is to be built in this Section.

However, the pricing implementation is still incomplete, because it does not include any motivational aspects for the employees to implement the prices. What is more, it does not take into account any structural aspects when implementing the prices in the company internally. Thus, the framework needs to be fulfilled by action controls. In order to understand how the price range implementation flows from the management decision to the

customer interface, the different structural levels of the company are needed to be drawn in to the pricing process. Thus, the responsibilities in pricing implementation can be determined in the company internally and the checkpoints can be indicated to specific operators in the process.

However, as it was stated in the Section 2.3.2, personal incentives in a way motivate the employees to act according to some specific goal (Malmi and Brown 2008). Thus, if the company aims to achieve profitability by its pricing, the incentives should be linked to this objective also. To ensure that the pricing aims to the top management's objective, the reward and compensation should be taken as a part of the pricing process by referring them to for example the EBIT of the company, or profit margin of the sales in a certain market area.

As a conclusion, the pricing process indeed starts from setting the objectives, which derive the price ranges and thus, the first planning phase addresses pressure on the implementation. Even though the pricing process planning happens in two specific phases, the pricing process implementation can be seen starting initially from price range settlement. To conclude the above discussion and principles of the pricing process implementation, this master's thesis suggests a four-step framework for implementing the pricing process:

1) Setting the objectives and analyzing the key elements
2) Setting the price range in global market
3) Implementation of the global pricing
4) Reward and compensation of the employees

These four elements in the pricing process flow chronologically after one another and they are summarized in to the form of a process model in Appendix A. There, the planning phases are also drawn, in order to clarify their necessity in the pricing process. Also, even though Hwang et al. (2009) suggested that the analysis phase would be separately taken in to the pricing implementation, this framework does not support that idea, because it can easily create tension between finance and sales departments of the company. *More importantly, this pricing process is built upon the idea that the employees are motivated to work according to the set profit driven ultimate goal, if their incentives are also linked to profitability.* Upon that, the financial measures that quantify the pricing realization are there to only report the profitability afterwards for the top management of the company. Thus, this framework approaches the pricing process from an after-monitoring point of view. Hence, the framework adds some checkpoints for the process by structuring the chain with organizational structure.

The profitability checkpoints in the pricing process are the most important practice in this

kind of pricing process, where the prices and their profits are monitored by top management only after the pricing realization. Thus, theoretically in the modelled pricing process in Appendix A, it would be possible to share discounts that hurt the profitability, especially when the profitability checkpoint is an operator from the sales department itself. However, by reward and compensation controls this threat can be at least partly eliminated, because it is not that likely to happen that the sales department would sell products that affect their own incomes. What is more, there can also be other checkpoints in the pricing process case by case, but the literature framework will not take a stand for that, because those depend on the organizational structure of the company.

To summarize the above discussion, the results controls are needed in the pricing process as implementers of the internal objectives and as practices to follow and monitor the pricing process. The process itself, then, is implemented by the action controls, which guide the operations towards the ultimate objective of the company, which is always a profitable pricing process. This framework represents a unique framework based on the existing literature on pricing management and pricing process. Being exceptional from the other pricing management or process frameworks, this framework presents not only practices to implement the pricing and its internal process, but also its planning.

3. RESEARCH METHODS AND MATERIALS

3.1 Methodological Positioning

In order to make the data readable and analysable, some methodological decisions have to be made. The data, whether it is quantitative or qualitative in characteristic, has to be positioned, organized and prepared for the analysis, while at the same time, the decisions that are made in these steps, embodies the methodology that is being used. So, on the basis of the made research decisions in methodological terms, the data can be set to the analysis and interpreted from the research question point of view. This Section will use Saunders et al. (2009, p. 138) research onion as a basis for the methodologies and reasons the logics behind the made choices.

Saunders et al. (2009) have defined a number of research methodologies for academic purposes. The research methodologies can be classified in six different themes, which consist of

- Techniques and procedures
- Time horizons
- Choices
- Strategies
- Approaches
- Philosophies (Saunders et al. 2009, p. 138).

From all of those six dimensions, one of the methodologies was chosen to be utilized in the data in the case company's context. Figure 7 represents all the research methodologies in a form of a so-called research onion, presented by Saunders et al. (2009) as well as the made decisions among them. The layers of the figure from inside to outside represent the themes that are listed above, and the bolded terms represent the made decisions.

First, as shown in Figure 7, the data collection and analysis in this master's thesis consisted of the data gathered from the case company's CRM system and discussions of the employees of the case company. The quantitative data contained the acquired data from the company's CRM system. More specifically it represented the sales price of the sold products with some other defining variables, this way, explaining the realized prices of the products. As important role as quantitative data represents in this master's thesis, the qualitative data had also a remarkable impact on the progress of this research.

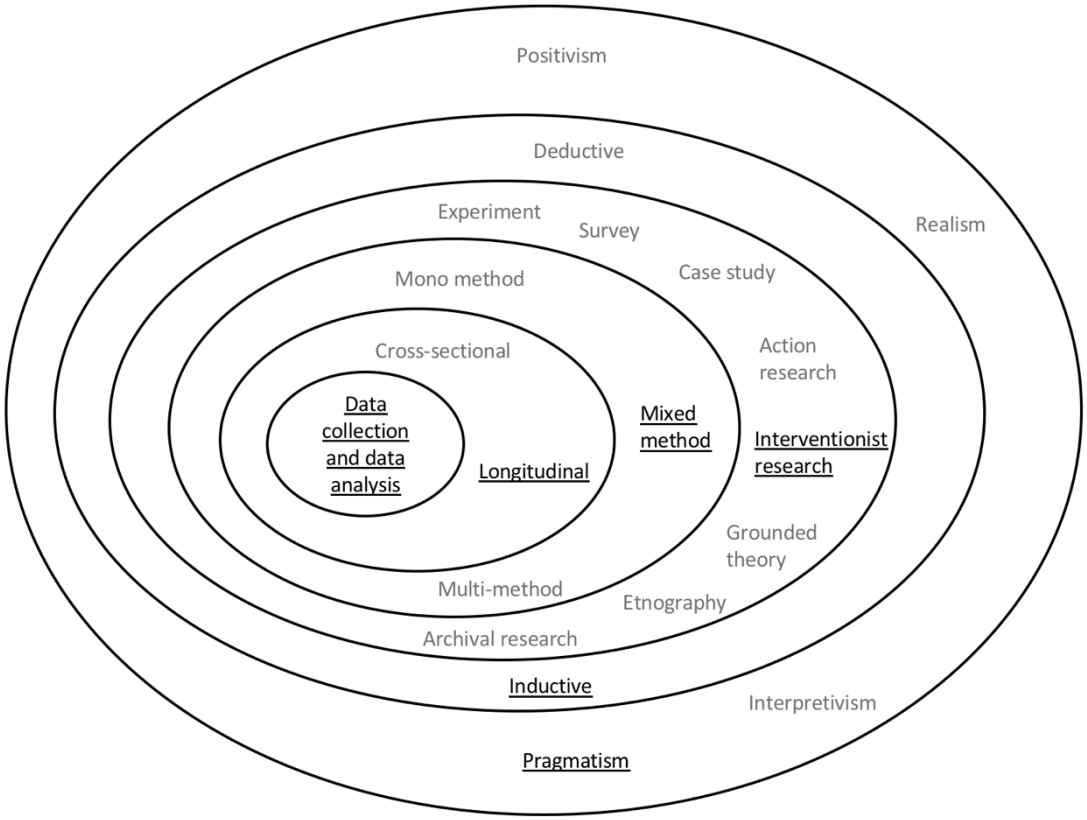

Figure 7. *Research onion showing the made research choices (modified from Saunders et al. 2009, p. 138).*

Qualitative data collection had a unique role in this master's thesis, because the researcher herself worked in the company during the research process. Therefore, the qualitative data was collected not only through interviews and organized meetings, but also in unintentional discussions that took place for example during other project's meetings. As a result, the researcher was able to make important observations related to the research question over the team boundaries. Moreover, the qualitative data gathering came naturally, because the researcher had gained knowledge on the research topic through a literature review on pricing, which helped to form not only the themes to semi-structure interviews, but also set discussions on the daily basis at the case company about the research topic. More about the both, quantitative and qualitative data content will be presented in the next Sections 3.2 and 3.3 and the data analysis as a whole will be presented in Section 4.

Second, as it could be concluded from the above, *the quantitative data was qualitized by using mixed method as a research choice* (Saunders et al. 2009, p. 153). Mixed method means combining quantitative and qualitative data in the research (Saunders et al. 2009, p. 152). Anyway, the quantitative and qualitative data had an equal emphasis on the research process, even though quantitative data was gathered and analyzed first. In other

words, quantitative data laid the basis for the qualitative data gathering, but they were co-ordinated when analysing the solution for the research question.

Third, the timeframe to examine the quantitative and qualitative data had to be determined. *The time window was agreed to be one year longitudinal time frame*, because during that time, the information in the company's pricing variables of the CRM system was seen to be measurable. The year before, the current system platform was not in use in the same form, which would have made part of the data quantification incomparable to other parts. Besides, a one-year timeframe provides a reasonable time window to analyze the results from company perspective, because financial statements usually rely on the same size time frame. Cross-sectional time horizon was not an option, because corresponding data from the same point of time in other year was not traceable.

Fourth, as stated in Section 1.4, interventionist research approach was used as a strategy in this master's thesis. Saunders et al. (2009) did not originally present interventionist research approach (Suomala and Lyly-Yrjänäinen 2012) among their research strategies, but it was added on the Figure 7. This is because interventionist research has been discovered after Saunders et al. (2009) have published their literature of the research methodologies and therefore, it has created debate only afterwards among the scholars.

Anyway, in the case where the researcher actively works in the research environment, it is self-evident that the researcher facilitates the change and affects the process of change, which is called interventionist research (Suomala and Lyly-Yrjänäinen 2012). Overall, *being part of the company's daily operations as an employee, the researcher participated in developing the other projects also, that affected directly or indirectly to the pricing process project*. A good example of this was participating in a CRM system development project, in which the researcher added information to the system by so called mass drives. In that process, it was possible to determine the priorities of the information adding to the CRM system, so by that, the researcher indirectly impacted on the pricing process related project. So, on a daily basis, the researcher had a possibility to unintentionally or intentionally end up in situations, where she could gain information about thesis-related questions.

Fifth, what comes to the research approach, the master's thesis was carried out inductively. This means that the *gathered data functioned as a base for making conclusions* (Saunders et al. 2009, p. 592) of it, by which the changes will be made to the pricing process. So, the conclusions of the analysis were result driven.

Sixth, the research philosophy followed pragmatism, because it relates strongly to inter-

ventionist research strategy: interventionist research means that both subjective and objective angles are present in the research and the researcher cannot outsource oneself from the subjective setting (Suomala and Lyly-Yrjänäinen 2012). However, the objective angles of conducting the research could be speculated afterwards. The same thing applies also to pragmatism, where the priority in conducting a research is seen in answering the research question by combining different angles, from both quantitative and qualitative points of view, as well as subjective and objective angles (Saunders et al. 2009, p. 110, 194).

In this master's thesis, the amount of data was in a hard position without a specific classification, because there are many types of data sources. Next, the research proceeds to the data organizing phase. The data organizing phase focuses on classifying the data according to the decisions made above and describing how the data was gained throughout the research project. Also, it will categorize and explain the data sources from the basis of the methodological decisions and briefly open for which purpose the data is used in the context of the pricing process framework.

3.2 Research Process Description

According to Saunders et al. (2009, p. 138), the research starts by collecting the data. In order to analyze the data, it should be prepared for the analysis according to the made methodological decisions and principles set in the literature framework. In this Section, the research data will first be organized and presented starting from the interventionist research position that the researcher had during the project. After that, the qualitative and quantitative data acquired for case resolving purpose are being presented from this same perspective.

Before starting the research project, the researcher went through the initial data that she had gathered before starting the research. The initial data is based on previous work experience at the case company. Before starting the research, the researcher had worked at the case company as a Sales Coordinator and currently, as a Sales Development Associate. Before the research, as working as a Sales Coordinator, the researcher had gathered information not only about the pricing policy and the pricing process itself, but also about the two customizable products of the company, whose prices are under examination in this research. While carrying out the pricing process research at the case company, the researcher was responsible of the sales analytics of the sales department, thus, responsible for sales reporting to the team and participating in CRM system implementation as well as representing the company at fairs and other sales occasions.

When officially starting the research project and acquiring data of the research topic, it

was first started with quantitative data gathering. Gathering the quantitative data, which consisted of pricing information and other order-defining variables, aimed to the making of a current stage analysis of the price range implementation. However, *current stage* in this context is a rather misleading term, because the quantitative data relies unavoidably on the historical data of sold products. So, the data gathering started by agreeing on the timeframe, which then, was generalized to cover the whole research timeframe. The timeframe was agreed to be 1.3.2017-28.2.2018, which is a one-year timeframe. The timeframe for the research conducting was a necessity, because the company is experiencing a high growth and that is why the changes in the company's internal procedures and policies are being changed from time to time. As a result of this, in order to make the analysis of the pricing process, some of the observations are being generalized, so that the research making would be possible. In practice, this means that all the changes in the case topic after the end date of the timeframe will not be taken into account when making the conclusions. Therefore, in the end, the conclusions from the analyses are made based on the generalization of the research data, while the data might have changed during the conclusions formation. However, those possible changes in the process will be discussed in the end of this master's thesis.

By following pragmatic positioning from the research methodology, the quantitative data gathering worked out as a way to choose the most relevant interviewees for the research. So, the quantitative data and analysis lead the qualitative data analysis by pointing out the most interesting qualitative data sources. The quantitative analysis as a whole will be introduced in Section 4.1, but as an outcome of that, four persons were chosen to the interviews.

The four interviewees represent two market areas of the case company. The interviews were conducted with semi-structured interviews. Semi-structured interview means that the interviewer has a list of themes and questions for the certain topic, which are to be covered (Saunders et al. 2009, p. 320). These topics and questions can vary from interview to interview. Still, the same interview structure was followed in all the interviews, though some additional questions were presented if needed to. The interview structure as a whole will be presented more accurately in Section 4.1.2.

After interviewing the Sales Directors, also the company's Head of Sales was interviewed. In his interview, the researcher aimed to verify the Sales Directors' conceptions and find out, what kind of changes he would be ready to implement through this master's thesis. More importantly, the interview structure followed the same structure as in Sales Directors interviews, but the questions were positioned from the management point of view. Thus, the researcher was able to set the expectations of the desired solution to a

certain level. Similarly, as above, the interview structure of the Head of Sales as a whole will be presented in more detail in Section 4.1.2.

As important as the interviews were from the qualitative data gathering point of view, the regular meetings and other discussions about the research topic with other teams played a specific role in the research process. The regular fortnight meetings were started with CFO at the same time when starting the quantitative data gathering. Later on, also the Sales Development Manager and the Head of Sales joined to the regular meetings. During the regular meetings, an update about the findings were made and the next steps towards the solution were agreed upon. While working as a Sales Development Associate in the case company, the researcher also gained expertise about the research topic intentionally and unintentionally in other cross-team discussions as well. These discussions were marked on the research diary and classified according to their relevancy of built framework. More detailed introduction about the research diary will be presented in Section 3.3.3.

By this far, this Section has presented the proceeding of the data gathering and interface with methodology. In order to understand the structure of the data gathering flow, Figure 8 was formed. There the complex, even though chronological, data gathering and analysis progress was summarized.

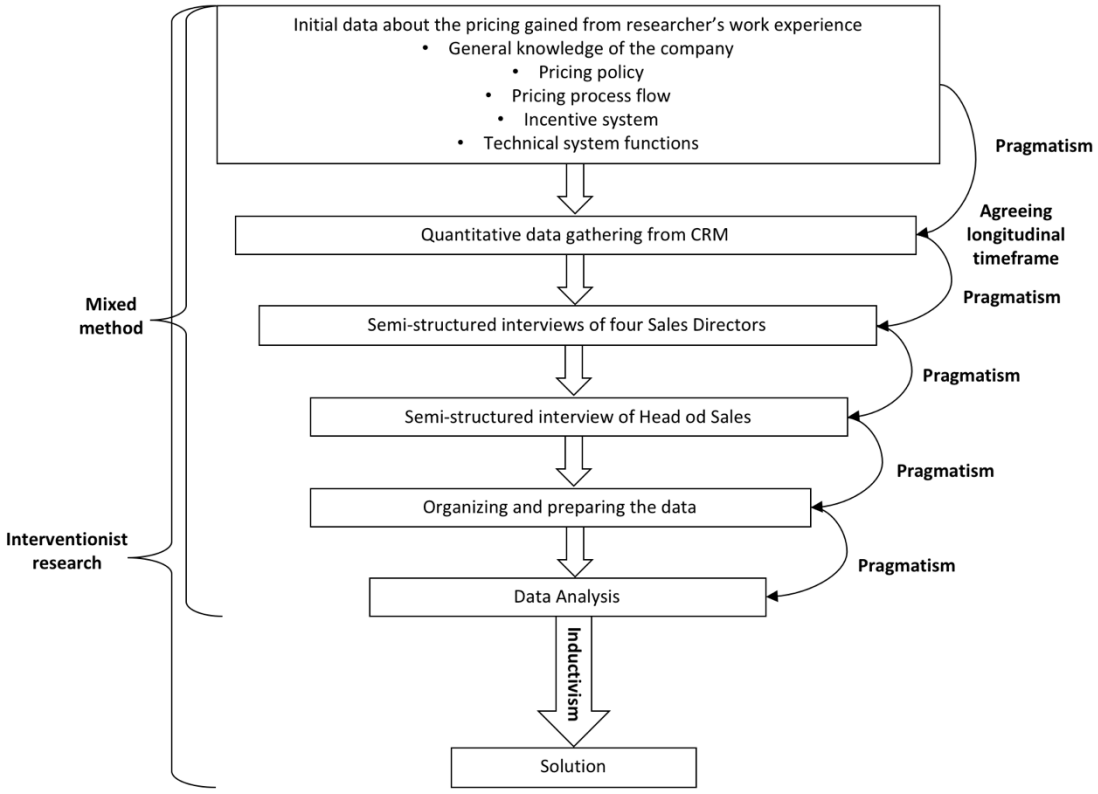

Figure 8. *The methodological decisions narrow the research towards the solution.*

As it can be interpreted from Figure 8, the research proceeded hand in hand with specific methodological decisions. The *interventionist strategy* followed the researcher throughout the process, but it had the most specific impact in the beginning of the project, while the work experience on the company provided a unique source of information for the basis. Besides that, the researcher gained insight about the research topic throughout the project. However, in order to keep the figure simple, other than semi-structured interviews were not marked to Figure 8. Anyway, those data gathering situations were documented to the research diary.

What is more, delimited *longitudinal timeframe* was a necessity to be able to conduct the analysis of sufficient amount of sales orders, rather than reviewing the whole history of the case company. The timeframe was agreed at the same time with quantitative data gathering start, as earlier stated. Figure 8 also shows that *pragmatism* characterized the research throughout the whole project, as the preceding part of the data gathering always guided the next data gathering step, by contributing to the research question as well as possible. The clearest evidence of pragmatism was the transfer between the quantitative data analysis and qualitative data gathering, because the Sales Directors were chosen to the interviews according to the quantitative data analysis results. In fact, pragmatism embodies the whole pricing process formation: in two-phased planning framework presented in the Section 2.4, the pricing process implementation will be built according to the price range setting, thus the formation of the pricing process is dependent on the first planning phase results.

Also, while using both quantitative and qualitative data, *mixed method* was a methodological decision in order to answer both planning phases, price level setting and pricing process dilemma, of the research. At last, *inductivism* positioned the analysis in a way that based on the gathered data, when the conclusions were drawn. From the research point of view, the price range setting and the pricing process formation were both dependent on the financial and non-financial measures and the results provided by them. Hence, the data drives the conclusions and decisions during the research.

As the research process has been set in methodological frames and organized, the next goal is to deepen the content of the research by representing the gathered data. The gathered data, like above discussed, consist of many data sources. Because the sources of the data affect the conclusions by large measures, the data measurement will be introduced based on three categories: *initial data*, which is highly subjectively observed data before starting the project, *quantitative data*, which is based on the CRM system of the company and is more objective data, being machine automated data, and at last, *qualitative data*, which is based on the both previous two and is characterized by subjective and pragmatic

measures.

3.3 Quantification and Qualification of the Data

Once the data has been organized, it will be introduced in more detail from the data measurement point of view. By this far, the data has been discussed only from the data gathering and methodological point of view. Still, the data needs to be defined and set in to the context of the research question by characterizing it from the case company's point of view. This Section will present the empirical data by quantifying and qualifying it for the analysis. The Section is organized according to the data gathering structure, which was presented in Figure 8 of previous Section 3.2.

As Section 3.2 presented, the researcher had initial data about the current pricing process, based on her work experience at the case company. Thus, she had a subjective idea about the current organization structure in the pricing process, price level, pricing process flow, incentive systems and knowledge of the technical systems of the company, such as the CRM system.

Other than that, intentionally gained research data can be classified as quantitative or qualitative data. Whereas quantitative data gathering was simply about acquiring data from some specific timeframe, qualitative data gathering was carried out in three different ways. First with regular fortnight meetings about the research proceeding with CFO, and later also with the Sales Development Manager and the Head of Sales. Second, semi-structured interviews of Sales Directors and the Head of Sales were carried out. Third, unintentionally held discussion with other teams about the pricing management related topics were held throughout the research process.

In order to perceive the complex nature of the research data, the data will be quantified and qualified from three aspects: initial data, quantitative and qualitative data. Those all had a specific role in conducting the research. The initial data about the pricing process will be presented separately, even though it includes both quantitative and qualitative data content. However, it is needed to present that way due to interventionist research strategy emphasis of this master's thesis. If not presenting the initial data separately from quantitative or qualitative data, it would hurt the validity of the research, because the source of information cannot be verified for example from the research diary.

First, the initial data about the pricing process will be presented from the researcher's own point of view. Secondly, the quantitative data will be presented in a form of sales order data. After that, the qualitative data presents the unintentionally and intentionally gathered data. However, the analyses, that will be presented in Section 4, will be based

on the agreed timeframe, because it was made as a delimitation decision.

3.3.1 Setting the Initial Data

Having work experience in the company for some months already when starting the research project, the researcher had knowledge of the case beforehand. As earlier presented in Section 3.3, interventionist research characterizes the researcher's position while conducting the research project. While having a big amount of information gathered already before starting the research project, it must be presented as initial information for the basis. This Section will present the data that the researcher initially had before starting the pricing process research. The initial data will be presented from the agreed timeframe point of view, even though the researcher has worked in the company outside the research timeframe as well. This Section will introduce the following pricing process-related data

- General information about the case company and its position at the market
- Internal structure from the pricing process point of view
- Current pricing policy
- Current pricing process implementation
- Incentive system of the case company
- The used technologies in pricing

Firstly, the case company has been in the industry for approximately ten years at the moment of starting this master's thesis project. During that time, it has been able to keep up its one certain, high margin, price level on each global market area. The case company came to the market by positioning its product as a high margin product. Ever since, the prices have been kept approximately at the same level. While keeping its place as a market leader in the industry with its products, *the case company has been able to maintain the certain price level and thus, it does not experience pressure in changing the price range.*

Secondly, the case company is an industrial product manufacturer, which uses dealers as intermediaries to sell its products. The company has a Head of Sales, who manages the operations of the whole sales department by representing the top management of the company. Structured under his position, there are Sales Directors responsible of the territorial sales and supporting the dealer's sales work in their market territory. The company has Sales Directors globally. Moreover, the company also sells its products directly to chosen end customers, which is called global account program. However, this master's thesis focuses on examining the dealer pricing, so global account customers are ruled out from analysis. Figure 9 represents the hierarchy in the pricing process.

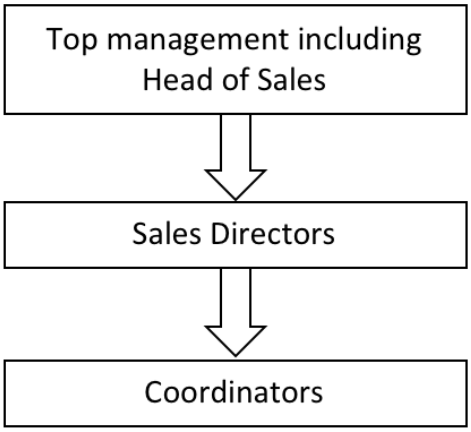

Figure 9. *The structure of the current pricing process operators.*

The Sales Directors negotiate the pricing and agreements with the dealers and thus, the price is formed. As it can be interpreted from the Figure 9, after the price has been agreed, the Coordinators at the factory take care of proceeding the order for the production. They work in the customer interface, helping the dealer by providing them with the order confirmation and invoicing.

Thirdly, the case company implements its pricing by certain price limits. Because the pricing can be formed with several logics, a more detailed function of the pricing logic is not needed to present. Moreover, it does not have an effect on making the analysis further on, because the quantitative data founds only the price range analysis, and not the logic behind it, because the company is not interested in changing its price range as a priority. Yet, in case company's context, the price range is determined as a dealer discount from the specific list price. The minimum dealer discount is XX% and maximum is agreed to be YY% of the list price. What is more, by under specific agreement between the Sales Director and the dealer, the dealer can have maximum of YY+Z% total discount depending on different variables, such as order batch size. Nevertheless, these prices are always negotiated separately by the Sales Director and the dealer, order by order. This price range is presented in Figure 10 to clarify the complexity of the price range.

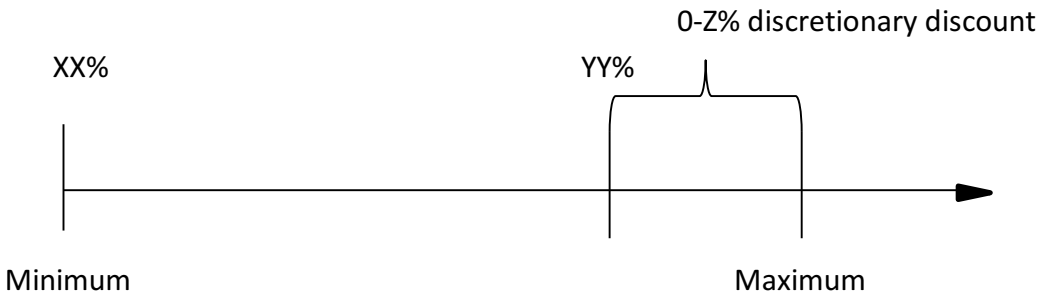

Figure 10. *The simplified pricing logic of the case company.*

Anyway, the greater discount than maximum of YY+Z% can be given with the permission of the Head of Sales and the pricing in those cases are agreed case by case. Also, if the Sales Directors sell the products during some agreed special pricing campaign, the discount from the list price can be over this maximum limit. The campaigns are always approved and set by the Head of Sales.

Fourthly, in addition to the above, the researcher had initial information about the current pricing process implementation proceeding. The information is based on the Sales Coordinator's and Sales Development Associate's work, as she had work experience on both, working as an operator in the pricing approval phase in pricing process and participating in the sales work, for instance in the industrial fairs. Thus, the researcher knew the different pricing process steps in the process beforehand and was able to model the current process model based on her existing knowledge. Thus, combining the initial data and placing it to the framework built in 2.4, three different pricing process formations could be recognized. The reason for having three different pricing process models is that the price can be formed in three different ways, which can be classified as follows:

1) The case company approaches a potential dealer in order to add it to its network or the potential dealer approaches the case company to become its dealer
2) A current or potential dealer approaches the case company in form of inquiry to sell its products in their project
3) The case company sets a campaign, where the prices are lower than the maximum limit in the pricing policy

First, the pricing forms directly according to the limits defined by the pricing policy. The Sales Director, in this case, calculates the pricing independently for the dealer by following the maximum dealer discount limit that she or he can give. After the negotiations and agreeing the price together, the agreement will be signed. Then, even though the price basically bases on the agreement, the Sales Directors usually provide a quote for each order, especially in the American markets. Thus, the pricing is formed either directly based on the agreement or by implementing the quote loop. Based on this information, the process was set to framework built in literature review and modelled to form of Appendix B.

Second case occurs when a dealer, whether potential or existing, approaches by appealing to some project. Project in this context means a project that the potential or existing customer is about to participate in and which requires exceptionally big quantity of products. Thus, the Sales Director provides the pricing for the product batch directly in the form of a quote, as can be interpreted from the Appendix C. So, at the same time when offering a quote, the Sales Director may suggest pricing and agreement negotiations for the dealer

if they have not signed it yet and the dealer seems interesting from the wider co-operation point of view. If the project batch of the product is big, over the defining limits of the pricing tool, the price should be checked with the Head of Sales. Therefore, the arrows in Appendix C lead via top-management approval or denial. According to the approval or denial of Head of Sales, the quote will be modified and provided to the dealer. If instead, the Head of Sales denies the price modification, the quote will be formed according to the pricing tool.

Third, occasionally, the case company sets product campaigns, during which the products can be bought for lower price than normally. For instance, usually the company offers special prices for the products during the industrial fairs and always for the dealers, who buy the products for review to the end customers. Usually, this kind of pricing formation are only for one-time orders, so they do not have anything to do with pricing or agreement negotiations. Thus, those were not marked to the process model either in Appendix D. So, the prices realized through this pricing process are usually prices that deviate from the given price range.

To summarize the above discussion about the pricing process, there can be either basic, project or campaign-based pricing proceedings. After the pricing formation through any of these three different paths, the price proceeds by the same logic in every case: the Sales Directors check whether the purchase order sent by the dealer has been formed correctly, and either approves it or denies it. If she or he approves it, the Coordinator makes a sales order of it to the company's CRM system and based on that, sends the order confirmation to the dealer and Sales Director for checking. Otherwise the order will go back to the quoting stage. However, when reaching the sales order stage, the value of the order appears to Sales Directors sales record in the company's CRM system. Based on the order intake, the Sales Directors will receive bonuses of her or his sales work. At last, according to the agreed payment term, the order will be invoiced.

Now, as the pricing policy and the process of implementing it are presented, the motivation of the Sales Directors in following the pricing policy is needed to present in more detail. Next, the reward and compensation system of the Sales Directors will be gone through. The reward and compensation system in this research is only examined in the Sales Director level, because they are the only ones that can impact on the pricing formation and change it.

Fifthly, the current incentive system is based on the order intake, like stated above. The Sales Directors have a certain price range within which they have to implement the pricing. Also, as above stated, if they feel that they would have to cross the threshold of the maximum price limit, they have to get a permission for the special price from the Head

of Sales. So, they are encouraged to sell as much as they can in these certain pricing tool limits and in rare cases, they can ask for more flexibility in pricing negotiations. Thus, the bonuses are based on the turnover of their own sales record. What is more, anyone of the Sales Directors do not know the production costs of the products and thus, they do not know the profit margin of the products either. *As a consequence, they base their pricing on the limits of the pricing policy and sell the products by volume driven motivation.*

Sixthly, IT systems implement the prices technically in the pricing process. Considering IT systems, the researcher knows the flow of the pricing formation in the IT-processes, because earlier, she worked as Coordinator between the factory and the Sales Directors and the dealers, by handling the sales orders and other documents. What is more, the current state of the IT systems in the context of pricing is that the profitability of the sales work is not monitored as accurately as the top management desires. As a summary, when starting with the pricing process research, the researcher herself knew the possibilities and the limitations of the current IT-systems.

Concluding the six aspects in the initial data; they all have their possibilities and limitations for which the researcher aims to respond with the ultimate solution. While having this data as a basis for making the research, the start for the intentional data gathering was easy: the first thing was to make an analysis, how the current pricing policy has been followed. This need raised from the fact that the profitability or pricing implementation of the products has not been monitored in any way in the company earlier. Hence, in order to form a pricing process that serves the meaning of the ultimate goal of the pricing process, monitoring the pricing, the condition of the *current* system has to be analyzed from the weaknesses and advantages point of view. Only based on that, an enhanced pricing process can be formed.

3.3.2 Quantifying the Data

Based on the initial information, the pricing process examination was started by a *current stage* definition of the realized prices. This kind of analysis in the pricing process was reasonable because the pricing process framework, presented in 2.4, suggests that the pricing process starts by financial and non-financial objective setting. As said earlier in this Section, the company is satisfied with its current prices range, which is globally unified price level for all the market areas. *As a consequence, the analysis of the key elements is not needed in this case*. More importantly, the case company's objective in pricing process culminates on practices of monitoring the pricing, especially from the profitability point of view. Thus, for now, the aim of the quantitative data is to determine, how the pricing policy has been followed by the Sales Directors.

As presented previously in Section 3.3.1, the gathered quantitative data consisted of sales order information gathered from case company's CRM system. In order to make the sales order data comparable, the data had to be compared to other variables. The most interesting thing from pricing process point of view was to examine first, whether the realized prices in the sales orders corresponded to the price range that has been given from the top management of the company. This kind of analysis had to be made, because there does not exist any data on the realized discounts that have been shared for the dealers. Thus, the realized prices have to be compared to the list prices of the two products and that way, determine, if the discount has crossed the maximum pricing policy threshold. The realized discount can be determined by the following formula:

$$Realized\ discount = 100\% - \frac{Realized\ price\ per\ product}{List\ price\ per\ product} * 100\%$$

In order to make this kind of analysis, all the orders of case company's both products that had been sold during the agreed timeframe 1.3.2017-28.2.2018 were driven from the company's CRM system and taken in to Excel analysis. In order to make the analysis, some specific defining variables were taken in to the analysis, so that the reasons for the possible deviations from the price range would be more easily detected directly from the dataset. The original data of the two products consisted of the following variables from the CRM system

- Sales order number
- Sales date
- Responsible Sales Director
- Dealer's name
- Market area
- Product specification
- Product quantity
- Dealer discount
- List price
- Realized (discounted) price
- Order notes
- Exchange rate

After gathering the data to the Excel file, the analysis could be started. The aim of the analysis was to see by the products, if deviations from the price range exist. The initial data let assume that there would be some deviations of this, because of the project- and campaign-based pricing processes. However, it is interesting from this perspective to examine, whether the deviations can be explained by the CRM system. After gathering this data, the quantitative data analysis could be started. The analysis will be presented as a whole in Section 4.1.

3.3.3 Qualifying the Data

Besides the quantitative data, the researcher also gained insight about the pricing and the

pricing process throughout the research project, mostly intentionally, but also unintentionally while working as a Sales Development Associate for the case company. Thus, the qualitative data is needed to gather together and qualitize it from the research process point of view. This Section will introduce the content of qualitative data of this research.

Basically, the qualitative data consist of three different case specific source types. Firstly, the regular meetings with CFO kicked off the research project and supervised the proceeding of the quantitative analysis. Later, the Sales Development Manager and the Head of Sales joined to these regular meetings due to the joint topic of the pricing process determination. Secondly, the researcher gathered data by interviewing four chosen Sales Directors and the Head of Sales on the basis of quantitative data analysis. Thirdly, the researcher ended up discussing her research topic at the case company while working there. These discussions were either intentionally gathered together in order to coordinate the needs of different departments while building the implementation in the analysis phase. As meaningful as those, the researcher also ended up in discussing the research topics unintentionally, such as at other project meetings, while working at the office of the case company.

In order to analyze the whole qualitative data gathering overall, all the meetings and discussions on the topic were marked to the research diary, Appendix E. Along with the date, the meetings and discussions were also classified according to their contribution to the pricing process by marking down the topics that they covered in the context of pricing process. Moreover, the intentional and unintentional characteristic of the discussions were marked there separately. Thus, the interventionist research strategy could be demonstrated and verified.

First, at the same time when carrying out the analysis of the quantitative data, the researcher agreed a regular fortnight meeting schedule with the company's CFO. Thus, the analysis proceeding, and findings could be analyzed systematically together, guiding the research process pragmatically towards the ultimate goal. In this part of the research, the qualitative data affected directly on quantitative data by qualitizing it: the CFO supervised the quantitative analysis from his own subjective perspective towards the ultimate goal of the pricing process by reviewing the quantitative results with the researcher. What is more, the gained results from the quantitative analysis laid a foundation for the semi-structured interview's planning. Later, when the quantitative data analysis was coming to an end, the Sales Development Manager and the Head of Sales of the company joined the regular meetings. Thus, the solution for the research question could be assessed with the joint consideration of both the sales and the finance departments' teams. So, the emphasis

of the analysis was first in the quantitative data, but when proceeding to analyze the results more deeply, the meaning of qualitative data emphasized by acquiring the qualitative data from multiple sources i.e. representatives of the company.

Secondly, as above argued, the quantitative data called for qualitative data to support the results. Thus, four Sales Directors and the Head of Sales of the case company were invited to the separate semi-structured interviews. The interviewees were chosen to the interviews as a result of the quantitative analysis.

While the quantitative data measurement offered a way to analyze the implementation of the current pricing policy, the qualitative data offered an aspect to analyze, whether the current pricing process really included some weaknesses in letting the deviating prices flow through it. So, with the semi-structured interviews, it was then possible to measure whether the results enforce or invalidate the signs that the quantitative data measurement pointed out. The other goal of the interview was to determine, whether the Sales Directors experience some bottlenecks in the current pricing process. Hence, four Sales Directors from different market areas were interviewed from the basis of the price range and pricing process implementation points of view. Then, the Head of Sales was interviewed from the basis of the management and monitoring point of view. So, there existed a hierarchical target for both interview levels.

The interviews of the Sales Directors were carried out by semi-structured interviews, as stated earlier. The interview structure of Sales Directors, presented in Appendix F, consisted of three thematic entities, which were *pricing induction, price and agreement negotiations and pricing process.* By choosing these as the main themes, the relations and dependencies within the team members were revealed, because they have inducted each other. Also, by taking the pricing and agreement negotiations into the examination, the pricing logic by each Sales Director could be perceived and compared to pricing process model drafted in the initial data phase. At last, the criticism and benefits of the current pricing process were discussed. Thus, the researcher could draw a picture of the characteristics that the Sales Directors desire to keep in the process, and on the contrary, which are the major bottlenecks in the process. This kind of target in the interview structure helped to plan the implementation of the pricing process from beginning to the end.

Basically, the same structure as used in the Sales Directors' interview, followed also to the interview of the Head of Sales. The interview structure can be viewed from the Appendix F. However, the questions were formed from the management and pricing monitoring point of view more importantly. Thus, the researcher could assess, in which kind of changes the company's top management would be ready to carry out the solution that will be built by the research. However, this was also discussed separately from time to

time with CFO of the company in the regular meetings.

Thirdly, besides the planned interviews, some other qualitative data gatherings were conducted during the research project. These discussions were either intentionally together gathered meetings, or the researcher ended up in those unintentionally while visiting at the case company's office for work. The discussions included other team representatives, such as Customer Service and Delivery Director and Technical Application Specialist who provided their opinions to the pricing process formation or set limitations for the solution by their own concerns. Also, the researcher shared ideas and ended up in discussing the research related topics unintentionally throughout the research project. These discussions are also documented in the research diary respectively (Appendix E).

By this far, the research has positioned the data and described the research process. The gathered data has been described from the methodological and empirical point of view by reflecting it to the pricing process framework formed in Section 2.4. Next, the analysis of the research data will be presented. The analysis concern specifically the quantitative and qualitative data gained for the purpose of the pricing process research. Hence, the initial data will be not presented separately in the analysis, but will work as a basis for setting and reflecting the analysis.

4. EMPIRICAL FINDINGS

4.1 Planning a New Pricing Process

By this far, this master's thesis has presented a literature framework of a pricing process and positioned and measured the data for analysis. The pricing process framework, presented in Section 2.4, consists of two planning phases, which result in setting the optimized price range and implementing the pricing range. To this purpose, Figure 6 and Appendix A were formed. In this Section, the initial, quantitative and qualitative data will be put together and analyzed.

From this Section onwards, the quantitative data will be written referring to financial measures and qualitative data to non-financial measures. This is a result of putting the gathered data in to the context of the case itself. The proposal will follow the same structure as the proposed literature framework: implementing the pricing process in two planning phases, where the first aims to achieve price range optimization and the other to forming the pricing process itself. Before that the pricing process will be analyzed from the financial and non-financial measures points of views.

In the first planning phase, the aim is to set a price range for the company. In the case company's context, there is no need to conduct the price range analysis by the key elements, because the company already has an optimized price range, which they are satisfied with, while selling two high margin products, which are the research targets in this master's thesis. In turn, they are more interested in checking, whether the agreed price range, the pricing policy, has been followed. This is a result of the fact that the top management of the company desires to monitor the pricing more precisely, as discussed in Section 3.3. *So, the ultimate objective of the pricing process in this case is reaching a pricing process, which monitors the pricing on a continuous basis in different levels*. Hence, this master's thesis in a way implements the first planning phase from the opposite direction: by checking back by historical financial measures, if the pricing policy have been followed by comparing the realized prices to pricing policy.

According to the built framework in Section 2.4, the first planning phase cannot rely solely on the financial measures when making analysis of the price range, even when making this kind of comparative analysis. This is because both departments have their own interests and objectives, in the pricing process, which are required to be taken into account according to the literature framework. In this research, the objective of the finance department was emphasized by profitability interest rather than high margins in the

product, since the research topic was assigned by the CFO, who is included in the top management of the case company. What is more, the Head of Sales, also included in the top management of the case company was also interested in monitoring the pricing, but he emphasized the importance of the sales department support in the pricing process, along with the Sales Development Manager. Anyway, the price elasticity was still expected to come across as an objective of the sales department later on in the data gathering (Hinterhuber 2004).

Since that was expected to follow in the research, both the financial and the non-financial data had to be taken into account. Hence, as earlier stated, financial measures represent the quantitative analysis of the realized prices. However, the financial measures call for non-financial measures for support. Hereby, non-financial measures represent the qualitative data in this research. In fact, this combination of the two data types was seen as a necessity and was already concluded in Section 2.1 initially, when discussing the global price management theory. That is, Section 2.1 showed, that only the research, that took account both quantitative and qualitative data analysis, approaches the pricing process from the same angle as this master's thesis. If taking into account only the other one of those data types, either internal or external perspectives in the pricing process would have an emphasis in the research.

So, even though the financial analysis would not focus on defining the key elements of the pricing process, it will still take into account the reasons that might be behind the deviating prices. Therefore, the financial and non-financial analysis will approach the price range setting from the opposite direction: by comparing the financial measures to pricing policy and to review, whether the sales department experiences pressure on pulling the prices down. Hereby, the empirical part of the research will present a reversed framework for setting the price: comparative analysis. The comparative analysis, in a way, sets the literature review and the empirical research against each other. To illustrate the meaning of both the financial and non-financial data in the comparative analysis of the first planning phase, Figure 11 was formed.

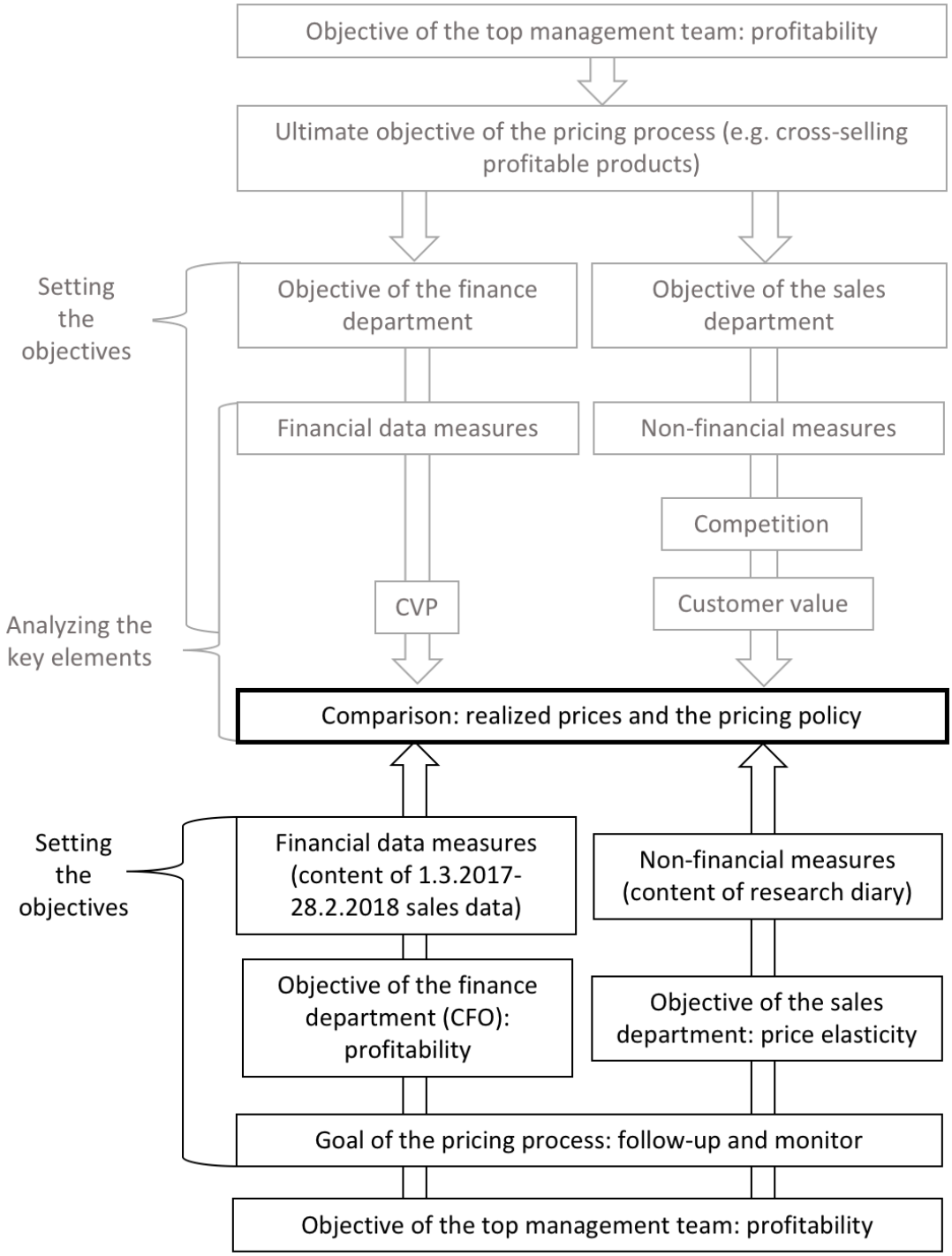

Figure 11. *The first planning phase in this pricing process research will be approached from comparative perspective.*

As Figure 11 presents, the first planning phase ends in the analysis of comparing the realized prices to pricing policy. While the comparative analysis relies on the financial and non-financial data, it represents cybernetic controls as a whole. *Hence, the definition of Green's and Welsh's (1988) cybernetic controls will be used as a basis for both, financial and non-financial analysis.* As a result of the comparison analysis, the second planning phase will be started.

The second planning phase, then, aims to build an enhanced pricing process based on financial and non-financial analysis and literature framework. While desiring to monitor the pricing more accurately, the case company will have to add the controlling actions to its pricing process in order to follow the pricing. So, the comparative analysis determines, how urgent the need for the monitoring is. The comparative analysis, in a way, defines what kind of controls in second planning phase must be set. In other words, according to the built framework, the results from the first planning phase i.e. the outcome of the comparative analysis determines, how the pricing should be followed in the pricing process.

Hereby, the next Sections 4.1.1 and 4.1.2 lay the basis for these planning phases. More specifically, those will present the comparative analysis by using principles of the cybernetic controls as a basis. The initial data will function as a basis for analyzing the results in the specific context and therefore, they are not analyzed separately in the lower Sections.

4.1.1 Financial Analysis in Current Pricing Process

The financial measures of the research consisted of the sales order data gathered from the company's CRM system. As presented in Section 3.3, the sales order data contained many variables, that helped to reason and filter the data from the research making perspective. The financial measures covered the timeframe of 1.3.2017-28.2.2018. In order to make analysis of the financial measures, they have to be quantified according to the set literature theory, which in this case is Green's and Welsh's (1988) definition of the cybernetic controls. Even though the objective of the top management is profitability, it will not be analyzed in the financial analysis, because it has already been taken into account when setting the price range and defining the incentives of the sales department initially. So, the financial analysis focus on examining how the pricing policy has been obeyed by the Sales Directors. Obviously, the deviations affect the profitability of the company, which is why the pricing process for monitoring the pricing was desired to form in the first place.

Referring to Green's and Welsh's (1988) cybernetic control definition, firstly, there has to be some quantification of the system. The quantification of the pricing in this case is the gathered historical sales order data, along with defining variables that were presented in the previous Section 3.3. These are quantified by the company's CRM system. Also, observations from the initial data referring to price range are seen as measures in this phase.

Secondly, there has to be standards, by which the set targets can be achieved (Green and Welsh 1988). So, the comparative analysis of the financial measures works as a standard for checking, if the pricing policy has been followed. The maximum standard limit in this

case is the YY+Z% pricing limit, but all the sales orders over YY% discounts will be checked in order to understand, by which logics to discounts have being shared.

Thirdly, feedback process will be needed to quantify, if the results correspond with the expectations (Green and Welsh 1988). The feedback process in financial measure's case corresponds the manual checking from the CRM system, which the researcher did when they found deviations from the comparative analysis. By acting this way, the researcher aimed to find out, how the deviating prices are marked to the CRM system, if they are.

Fourthly, theoretically, a variance analysis could be built on the basis of the feedback like Green and Welsh (1988) in their theory suggest, but will not be done in this research process, because it would have been irrelevant from the research question's point of view. The ultimate goal was to offer a feasible price monitoring practice, rather than determining, how well the deviations have been marked technically.

Fifth, according to the results, modifications to the system, in this case pricing process, will be made (Green and Welsh 1988). However, this will be done together with the non-financial analysis, so any conclusions about the price range or its implementation will not be drawn before the non-financial measures have been analyzed respectively. So, the conclusions of these both together will be drawn in next Section 4.2.

When starting to gather the financial measures from the CRM system, it was observed that *there does not exist an accurate calculation of the realized discount at the sales order record*. The only price information that there existed was the realized sales price. This made the comparative analysis rather complicated, because there was a crucial measure missing: the comparable discount to the comparative analysis. Hereby, the analysis of the realized discounts would have to be defined by referring them to the list prices manually.

Anyway, another finding at the same time was that the accurate, corresponding, list price was not marked correctly to the sales order, because the CRM system is not able to define the correct list price of the product options automatically. In other words, *the CRM system of the company was not able to track and distinguish the different option combinations of the products according to the list prices*. That is, each option of the product cost extra, but they are not accurately trackable in the CRM system of the case company. Thus, there exist many different products without actual price-related classification.

Because the list prices of the customized products are not either traceable in the company's CRM system, *the financial measures' analysis showed the first crucial result: the technical implementation of the pricing is not based in the company's CRM system*, which

is a fundamental requirement if wanting to follow the prices. Anyway, in the regular fortnight meeting with CFO on 8th of March (Appendix E) it was commonly agreed, that the delimitation would be made only to the standard products, Product A and B. This was because to those products, there exist specific criteria from the system point of view to distinguish them from the customized products. So, all the rest, customized products, thereby would be left out from the analysis.

So, the standard products' price categorization was possible to make with a little manual work. More specifically, the standard products were recognized from the original observations with a specific criteria coding and the list prices of the products were manually added to the Excel file for analysis. The differences between the original and quantified standard observations were gathered together in a form of Table 3 for demonstration. The data in the Table 3 has been multiplied with an unknown constant in order to protect the privacy of the case company.

Table 3. *The original amount of observations decreased to 30,4% from the original.*

Product	Total product sales (pcs)	Standard product sales (pcs)	Standard's share from total sales
A	24268	6464	26,6%
B	8012	3364	42,0%
TOTAL	32280	9828	30,4%

The numbers in Table 3 surprisingly pointed out another research finding. That is, the results on Table 3 let assume that the Sales Directors would not have a problem of customizing the product for the dealers' desires. As Pfäffli and Michael (2013) stated, one way to respond to the value that the customers wish, is to provide different features in it, so that they can get the full benefit out of it and thus, consider more value upon their purchase. Concluding that, the price is not the only variable in the selling situation by which the Sales Director could close the deal. *So, Table 3 points out a finding, that the Sales Director seem very often to use the option of selling the customized products.* The next analysis will show, how much the prices have been deviated.

Even though the amount of observation decreased to 30,4% from the original, they still include total 9828 observations, which was seen sufficient for conducting the comparative analysis according to CFO (Appendix E: 22th of March 2018). The comparative analysis of the standard products was conducted by the comparison of the three variables: realized

price and list price, by which the dealer discounts could be calculated, and the price limit. This comparison was made to both products (Product A and Product B) separately by Excel and the overall deviations from the pricing policy were drawn to histograms. The first comparative analysis for total observations was made to the both, Products A and B, Figure 12 and 13.

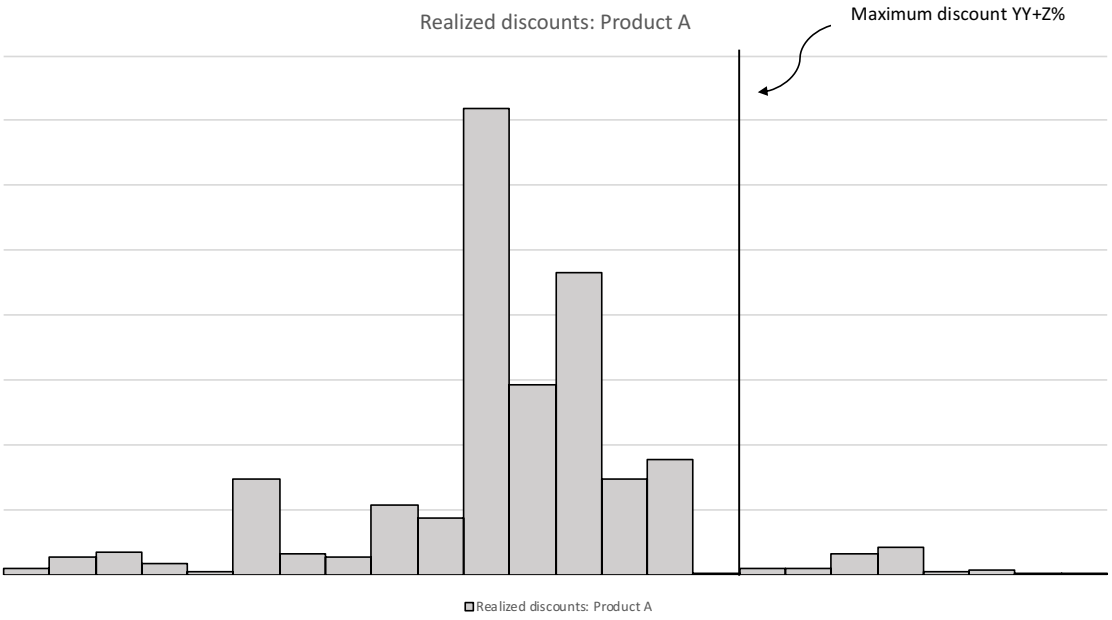

***Figure 12**. There exist some deviations of the realized discounts of Product A.*

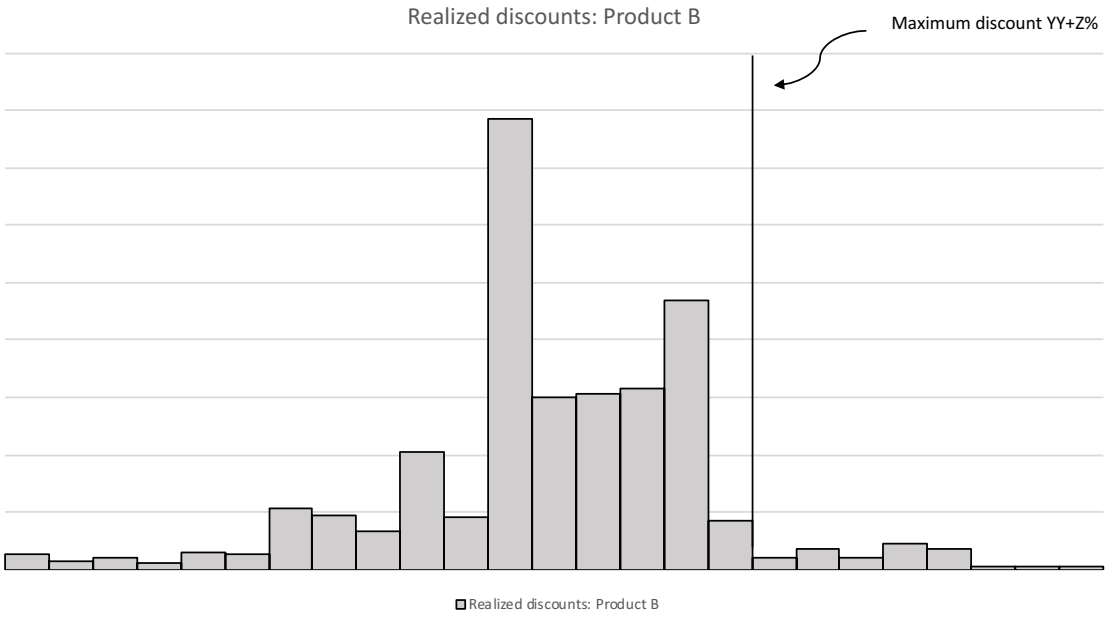

***Figure 13.** There exist some deviations of the realized discounts of Product B.*

As it can be interpreted from the Figures 12 and 13, there exist some deviations from the

given pricing policy. However, there are not many of those: according to accurate calculations, there were *some* maximum price level crossing of Product A and *relatively the same amount* for Product B. This was seen as a good result of the analysis, because there do not exist many of those compared to the total amount of standard product observations. Also, some campaigns could sometime cross this threshold, which is why all of those discounts cannot be seen as crossing the maximum limit of the agreed price range. Nevertheless, according to CFO (Appendix E: 4th of April), there exist surprisingly large amounts of realized prices between the YY - YY+Z% discount rate. Those prices, according to the pricing policy, should be given only for some specific reason, such as a big batch size or a lowered price campaign. Thus, the next step in comparative analysis was to determine, are those deviations dependent of some variables in the sales order data. Therefore, the analysis was further on conducted by covering all the discounts over YY%, which is the basic dealer discount, as presented in Section 3.3.1.

The next part in the financial analysis deepened to analyze the prices of Product A and B by *market areas and Sales Directors as determinants*. The analysis was carried out by the same histograms as above, but the filtering was made according to above mentioned variables, market area and Sales Director. In order to make the analysis comparable, the results of the histograms were gathered together to tables. To this purpose, demonstrative Table 4 was formed.

Table 4. *The comparative analysis was also made by each market area (The table was removed from the public version of the master's thesis in order to protect the privacy of the case company).*

As a conclusion of the Table 4, it seems that in the Market A, the discounts were applied most commonly. So, the financial data let assume that there could have been some "defaulted" reason of sharing the deviating prices at Market A, because the total deviation of the discount YY% is over 50% of the total products sold there. *So, the deviating prices in Market A were more like a rule than an exception from the YY% basic discount*. As said, it might be a result of batch orders, which would naturally be expected more commonly at the markets, which are located far away on another continent than the case company. As a conclusion, the results from the analysis in the Market A call for more detailed determination of the deviated prices.

In the Market B then, the prices seem to be closer to the YY% basic discount than in Market A and the results seem more accurate than the Market A's numbers because of the large amount of observations. As a conclusion of the comparison analysis of Market B, the results seem satisfying. All in all, it seems that there the Product B's prices are slightly closer to the YY% realization than Product A's. Anyway, if the sold amount of Product

B was bigger, the relative deviations could be expected to be the same. Anyway, in order to have a global pricing point of view to the pricing process, also prices of Market B should be analyzed in more detail.

At last, the data from Market C is not so accurate because of a relatively small amount of observations. Therefore, the Market C will be left out from further analysis in Sales Director level. However, since they are taken in to account in the financial analysis, the research project can be still defined to be covering the global pricing perspective in the research.

In order to get more accurate results on the two market area-specific comparative analyses a Sales Director-specific discount shares were determined by Markets A and B. Hereby, also the most experienced Sales Directors could be invited to the interviews. The results of the comparison analysis by Sales Directors can be seen in Appendix G.

Drawing the results from Appendix G, it seems that there is no ordinary rule when it comes to deviated prices: the deviated prices seem to vary by product, and by the Sales Director without any regular characteristic. However, one certain finding from Appendix G is that the volumes vary quite a lot depending on the Sales Director in question. This can be a result of a smaller market area, covered by a certain Sales Director or then, the customized products are more popular in the certain sales territory and therefore, the number of products per certain Sales Director was lower. However, comparing the results to the market area specific Table 3, it was interesting to note that the most selling Sales Director is from Market A, even though Market B has much bigger standard product sales amounts. Anyway, it seems that there are many more Sales Directors in the Market B, which distributes the number of sold products to a larger number of Sales Directors.

As a conclusion of Appendix G, the most selling Sales Directors are two Sales Directors from Market A, Sales Director 1 and 2, and two Sales Directors from Market B, Sales Director 4 and 5. Those together have sold approximately *W*% of all the standard products during the timeframe of the research. Concluding this, they have the most experience on different pricing situations and therefore, they were invited to the interview. Also, Sales Director 6 would have been a potential interviewee, but because he had not worked for the company during the whole timeframe, he was not invited to the semi-structured interviews.

In order to proceed according to the Green's and Welsh's (1988) cybernetic controls theory, the next step in the comparative analysis was to create a feedback loop on the analysis. To this purpose, the deviating prices over YY% percentage were detected from the CRM system. If the product was sold as a batch or included in some project or campaign,

the deviating price should have been marked somehow on the sales order record. If the marking was not found, the sales order number was written down to the list and the lists was sent to the chosen Sales Directors for checking before the interview.

The lists then, worked out as a basis to discuss the deviating prices in the interviews. As stated earlier, variance analysis of this feedback loop was not calculated, even though theoretically it would have been possible. In order to answer the research question, more important was to gather non-financial data on the price range next, so that the pressure of the price change could be assessed. Only after that, the conclusions of the comparative analysis could be set.

To summarize the above, the financial measures offered a comprehensive basis for the pricing process research. However, if only relying on the financial analysis when setting the price, the research would leave out the market related perspective entirely from the pricing. As discussed in the Section 2.1, both economical and marketing perspectives are needed when forming a global pricing process. Therefore, the pricing process proceeds now to analyzing the non-financial data.

4.1.2 Non-Financial Analysis in Current Pricing Process

As presented in the previous Section 4.1.2, the Sales Directors, who had the most experience on pricing during the timeframe, were invited to the semi-structured interviews. This meant the Sales Directors who had the most sales order records under their name. Besides those, the Head of Sales of the company was interviewed after them. So, their input on the research project represented non-financial measures, which not only explained the results got on financial measures, but also gave insight in building a pricing process that still maintains their motivation high to sell. That is, when building a process control, the other parts of the MCS's package have to be taken account respectively (Shimizu 2017, p. 2): if only adding results controls to the system, it may complicate the work of the people involved. That is why, action controls are needed to support the work also from the process implementation point of view. Besides the interviews, also the regular meetings with CFO, Head of Sales and Sales Development Manager and other discussions with the employers in the company took place as non-financial data sources.

So, not only results controls are the ones that guide the pricing process to right direction from the profitability point of view, but also action controls, which maintain the motivation of the operators in the process and also reasons the utilization of the process as beneficially for everyone (Shimizu 2017, p. 14). So, the non-financial data gained through the research project do not only consist of the pricing process related measures, but also organizational structures and reward and compensation aspects. It could be even claimed

that more important than monitoring the profitability, is to retain the motivation of the Sales Directors in their work. In other words, *rather than focusing on building the process alone, it is more important to compromise the objectives in a way that it does not certainly not affect the sales work motivation.* Ultimately, the pricing process should somehow benefit all the parties involved in the process. In this Section, the analysis of the interviews will be presented as a basis to form the pricing process, by also reflecting the organizational structure and reward and compensation system that it includes.

As in financial measures, in non-financial measures also, Green's and Welsh's (1988) description on the cybernetic controls was followed respectively. First, there has to be some quantification of the system. In this case, the quantification was the semi-structured interviews, which structure can be viewed in Appendix F. Secondly, a standard exists, by which the set targets can be fulfilled. In the non-financial analysis, the standard refers to two different things: the price range limits and the pricing process itself, by which the price range will be realized. So, as can be viewed from Appendix F, the questions below pricing process-title weighted these two topics (questions 9-19).

Thirdly, there has to be a feedback system in order to assess the standardization. In this case, the feedback loop was to interview the Head of Sales about the same topic from the management point of view. This interview was done after the Sales Directors' interview in order to assess the results based on those (Appendix F). Fourth, Green and Welsh (1988) suggested that variance analysis would be built upon the feedback results. In the non-financial measures' case also, it would have been possible, but it was not done, because it was seen irrelevant. At last, after the feedback results from both the financial and non-financial measures have been gathered, the pricing process will be modified to the purpose of the gained results. This will follow in Section 4.2.

The semi-structured interviews were all conducted over a period of two weeks between $16^{th} – 25^{th}$ of April (Appendix E). Before the interview was started with the questions, the lists of the deviating prices of the sales orders were gone through with the chosen Sales Directors. The outcome by common consent was that all the deviating prices were either campaign prices, or other special-case prices, which were agreed together with the Head of Sales separately. The deviating prices altogether condensed of the following reasons

- Volume discount on big batch size
- Project-based discounts
- Campaign-based discounts (including demo product discounts)
- The dealer is a potential reference customer

Other than the last one of them, the above-mentioned reasons were not surprising and

were included in the defined pricing policy and pricing models' description (Appendix B-D). However, the last in the list above is not included in the current pricing policy; the prices cannot be pushed down with a reference customer option. This verifies the fact that basically it could be possible to sell the products with too low a price, because the reason for providing a bigger discount is only *partly* acceptable. However, the result can be considered satisfactory, because among the approximately J total number of products in the initial analysis, only this one deviating sales order price could be identified. In the interview with the case company's Head of Sales (Appendix E: 25th of April), he also stated that he knows that the current system lets the Sales Directors price the products basically however they want. Furthermore, he stated that some of the Sales Directors follow the pricing process strictly and some of them to a lesser extent. What comes to following the price limits overall will be presented next.

The overall consensus from the Sales Directors interviews was *that there does not exist a real pressure of raising the maximum price range limit in pricing policy*. All in all, three out of four Sales Directors stated (Appendix E: 16th - 23th of April) that more price elasticity could ease their work, but at the same time, they do not ever feel that the price is a critical factor when closing a deal. What is more, all of the four Sales Directors stated, that the current pricing policy is very clear and simple to follow. Especially the price ranges and the special conditions to give more discount were stated to be good practices in the current pricing process (Appendix E: 16th - 23th of April). Also, all of the four Sales Directors had the same opinion that the dealers do not usually question the prices of the products. If they do, it is because the product specifications have something unclear for them as well.

The Head of Sales also stated in his interview (Appendix E: 25th of April), that the current one-price level practice globally functions really well for the current purposes. It has not caused any problems so far, since the case company also has a global account program for the global customers. He also stated that *the price decreases are seen more in bringing a new product out to the market rather than changing the prices of the current products* (Appendix E: 25th of April). However, since the desire about price elasticity objective of the sales department was expectable according to the literature review (Skouras et al. 2005, Hinterhuber 2004) and no specific reason for having more price elasticity was not found in the interviews of Sales Directors nor by the feedback loop of the Head of Sales, the results on non-financial measures do not address the pressure on financial measures to raise the maximum limit of the price range.

Nevertheless, two out of four Sales Directors feel that it would be wiser to share the responsibilities from the Head of Sales to the Sales Directors in a way that the Head of Sales

would not be the one who can give a permission for the deviant prices (Appendix E: 16th - 23th of April). Hence, the price would not have to be always checked all the way up in the top management. According to the Head of Sales (Appendix E: 25th of April), the responsibilities are needed to be shared and authorized to the Sales Directors. This refers to the fact that the company's goal is to recruit *D* number of new Sales Directors, which means multiplying the number of Sales Directors during the year 2018, which causes pressure to monitor the prices more efficiently. Hence, Head of Sales does not have resources to check and permit the deviating prices case by case with each Sales Director anymore. Anyway, with the current reward and compensation system, presented in the Section of 3.3.1, it is not possible to provide this kind of responsibility to any of the Sales Directors. That is, the price elasticity related objective and volume-based discounts are incompatible, if the motivation is not linked to the profitability: if not knowing how the discounts affect the profitability, the price elasticity will take the control and lead to lower prices.

The other part of the interviews then, aimed to reach an understanding about current pricing process as a whole. The overall impression from the pricing process was that there exist some individual and personal challenges in the pricing process, so the bottlenecks in the process cannot be generalized. One major challenge in the pricing process was that the *operators in the pricing process do not work in the same department, which sometimes make the delegation complicated between the Coordinators and Sales Directors*. This results in strong demonstration sometimes between the teams, according to one Sales Director's unintentional discussion on 16th of April (Appendix E). Therefore, more clear responsibilities have to be shared between the different departments.

Also, sometimes, the bottleneck in the pricing process seems to be in the order handling phase, causing that *the order confirmation sending to the dealer takes quite much time*. Two out of four Sales Directors wish, that the Coordinators would question the prices in the process, if there seems to be some inconsistencies compared to the sent purchase order (Appendix E: 16th of April). Hence, the Sales Directors would not have to check every purchase order in terms of pricing when the dealer sends it. In the case of two other Sales Directors (Appendix E: 16th - 23th of April), the prices are being questioned by the Coordinators, which was pointed out as a good practice. So, in this case also, the responsibilities have to be shared more clearly between the departments on a personal level.

According to the Customer Service and Delivery Director, (Appendix E: 24th of May), the order handling usually takes time in case where the purchase order received from the dealer lacks some order specific information. Other than that, the Coordinators need more support in their pricing work on a daily basis, because they relatively often come across

special cases in pricing, as Figures 12 and 13 presented. Hence, the Coordinators need more support in terms of pricing: as the results in financial measures showed, the CRM system does not form anything besides the realized price information of the product. So, the Coordinators are responsible on the correct pricing definition to the sales order record by their own price calculation capabilities. Anyway, they should be provided with proper tools to that work.

The Customer Service and Delivery Director was invited to the discussion of the pricing process on the 24th of May (Appendix E) in order to discuss the pricing process responsibilities within the team. There, a draft of the enhanced pricing process description was presented to her and the Sales Development Manager of the company. The Customer Service and Delivery Director agreed with the proceeding and sharing of the responsibilities. As was concluded in Section 2.3.2, the MCS's package in tactic planning has to be always made with interactivity (Bisbe and Otley 2004: Simons 1995, p. 109). This is also supported by the statement of the Head of Sales (Appendix E: 25th of April), according to whom the internal communication between the Coordinators and Sales department have to be enhanced. Furthermore, since the technical systems of the company do not yet totally support the work of Coordinators department, they have to be taken account in the system development in the action plan that will be presented in Section 4.3.

Besides the pricing process concerns, one of the Sales Directors (Appendix E: 16th of April) and the Sales Development Manager (Appendix E: 4th of May) raised a question about the support of the sales department in the pricing process. They both stated that they understand the need for the profitability monitoring as the case company grows, but the real concern during the research project was, how this kind of profitability management would support their work. The Sales Development Manager emphasized, that the pricing process has to be built in a way that it does not cause extra work for the sales department, while still bringing some supportive actions to sales department's work. This is something that requires some thought when forming the final, enhanced, pricing process model and action plan for the case company.

Altogether, there seem to be many hinders when planning a new pricing process. Many of the practices seem to refer to the responsibility sharing, because it came out as a topic in three out of four semi-structured interviews of the Sales Directors (Appendix E: 16th-23th of April). Therefore, when interviewing the Head of Sales of the company, a question concerning the department structure was raised. *The Head of Sales stated that he would be ready to change the structure of the sales department in a way that part of them will be authorized to monitor the profitability* (Appendix E: 25th of April). By re-organizing the structure of sales department by naming some of the Sales Directors to follow the

profitability, other controls in the MCS's package would also be effected. The next Section 4.2 will take a stand for compromising these controls together.

By this far, the non-financial measures have shown interesting points of view in both two planning phases. The results from the analysis function as a basis for building the pricing process in the next Section 4.2. Table 5 gathers together all the pain points and good practices in the pricing process by reflecting them to the above discussion on the non-financial results. The Table 5, therefore, functions in a way as a check list of building a pricing process in the next Section 4.2.

Table 5. *Principles of the pricing process implementation based on the analysis.*

Principle	**Explanation**
Feasible pricing monitoring	The new pricing process has to support the monitoring of the pricing
Price range	Has to be established
Sales support	The pricing process cannot burden the sales work
Responsibilities	The pricing process model needs an accurate responsibility description
Capabilities	All the people involved in the pricing process have to know the pricing policy
Sales volume targets cannot hurt	The case company has to keep its growth level
System flow	The pricing process cannot lengthen the service lead time

As can be interpreted from the Table 5, some of the principles are already in use in the current pricing process. These are *price range* and targeted *sales volumes*. The other principles are something that are needed to improve in the enhanced pricing process. These are feasible monitoring of the pricing, sales support, authorization, responsibilities, capabilities and system flow. *If the new pricing process does not fulfil these principles, it is not a functional pricing process.* When reflecting the principles to the pricing management limitations that were presented in Section 2.1.2, it seems that there is something familiar in them. Anyway, not to approach the problems only from the limitations point of view, the principles of the pricing process could be also directly reflected to the MCS's package, built in Section 2.3.2.

In order to build the *feasible monitoring practice* to the CRM system, financial measures,

which represent results controls, have to be created to support the technical implementation. Also, a pricing follow-up point is something that must have its own place in the pricing process implementation, as Hwang et al. (2009) in their framework suggested. Nevertheless, monitorability often refers to the technical limitations in CRM system, which does not support the pricing (Töytäri et al. 2017).

Sales support, sales volumes and system flow all refer to the same entity: the pricing process has to be built in a way that it maintains the motivation of every operator in it (Wouters and Wilderom 2008, Töytäri et al. 2017). And not only motivate, but also supports the work of the sales department. Incentives, which will be transacted to employers as rewards and compensations are something that are also a part of the MCS's package: if they are set correctly, they encourage the employers to work for the company's strategic goals (Flamholtz 1996), and thus, the system flow will be retained. By careful planning of the process, the pricing process will also function as a support for the sales directors in their work. At the same time when monitoring the profitability, valuable information about the profitability and price realizations for the Sales Directors will be also produced, which supports the transparency, that Wouters and Wilderom (2008) in their research emphasized.

Responsibilities could be linked to the administrative controls, which set the procedures for an individual to work as a part of the company (Malmi and Brown 2008). Anyway, responsibilities refer to incompatible time horizons limitation, but from an internal perspective, not external, like Töytäri et al. (2017) suggested. Capabilities, then, refer to knowledge and training of pricing: the Coordinators need more support and guidance in their work. As said in the planning's theory of MCS's package, the capabilities are organizations resources. So, if sharing the information and organizing it in the company, it benefits everyone (Morgan and Hunt 1973).

The pricing process principles reflected to the pricing management limitations and therefore, the pricing process cannot be changed with a short-term timeframe, like concluded in Section 2.1.2 and 2.1.3 (Pfäffli and Michael 2013, Töytäri et al. 2017). This arises from the fact in literature review, that *all the changes that are needed in the pricing management cannot be overcome in a short timeframe.* Therefore, the barriers in the pricing process were separated in to two categories, limitations and challenges, in the first place. On the other hand, since the principles are directly linked to managing the operations in some way, they could be naturally reflected to the MCS's package. In other words, the pricing process works in a way as a target, to which the changes are desired to be made. The MCS's package functions as a *filter* to manage the prices in process. Concluding all of

the discussion above, the financial and non-financial measures showed that the new, enhanced pricing process, needs to aim toward long-term changes and development and therefore the pricing process that will be formed throughout this research project represents a strategic framework to the case company.

4.2 Forming New Pricing Process

Whereas Section 4.1 presented the reasons and the principles of forming a new pricing process, this Section will aim to present, how those will be implemented in the new pricing process. Based on these practices, the new pricing process model will be presented as a solution. Like Section 4.1 showed, the new, enhanced pricing process represents a strategic framework to the case company. Therefore, an action plan is needed to implement it in the long-term as well. The action plan will also help to get the full benefit out not only from the pricing monitoring point of view, but also from the sales department point of view. This will be introduced in Section 4.3.

The pricing process formation, according to the built framework in Section 2.4, is based on the two planning phases. This master's thesis project also follows the order of those two: according to the analysis made in the previous Section, this Section will organize the analysis by first establishing the current price range and second, forming a practical implementation to that. The decisions made in this Section will be reflected with the literature review constantly, so that the made decisions could be reasoned and demonstrated. As an outcome of this Section, the master's thesis will present a viable price range for the case company and more importantly, model the pricing process for use.

The first planning phase, like illustrated in Section 4.1, consist of setting the objectives for the pricing process first and then, conducting a comparative analysis which sets the price range to definitive limits. The ultimate objective of the pricing process birthed a need for this master's thesis in the first place: the top management of the case company wanted to monitor the pricing more accurately and to make sure that the pricing related information is easily available for anyone in the finance or sales teams. While both, CFO and the Head of Sales represent the top management of the company, this profitability objective came clear in the kick-off meeting of the master's thesis project (Appendix E: 2nd of February). Anyway, the price elasticity objective of the Sales Department was emphasized by the interviews, as presented in Section 4.1.2 (Appendix C: 16th – 23th of April).

The department-specific objectives, then, guide the actions of the people. The literature presented that sales people usually aim to offer the lowest prices possible (Smith and Nagle 1993), so it would have been surprising if this would not have come out in any way

in the Sales Director's interviews. The literature review also emphasized, that in B2B markets, the customers do not usually see the price as critical factors, but more importantly focus on the whole service around it (Reichard 1985, Serhan et al. 2015). What came out from the interviews was that, even though the price elasticity was a desire for all the Sales Directors, they did not think that the price is a critical factor when closing the deal. What is more, the current pricing policy is considered to be very clear and simple to follow.

On the other hand, according to the literature review, the financial measures set the frames for the price range by their cost calculations and contribution margin, whereas the pressure that is addressed from the sales department side will create a need for compromises in the price range (Hinterhuber 2004). However, according to the comparative analysis on financial measures, it was concluded by the CFO that the current price range did not show any alarming observations or interdependencies (Appendix E: 22th of April), which means that the Sales Directors have followed the pricing to a satisfactory extent.

To summarize the above, basically, more price elasticity was desired by the Sales Directors, but otherwise the current price range was not considered to complicate the sales work in any way. Altogether, the conclusion about the financial and non-financial analysis is that there exists no pressure of changing the price range from its current state. *Hence, the current price range will be retained the same and the pricing policy remains unchangeable.*

The price range will be implemented through XX-YY% basic dealer discount and the maximum extra discount of Z% can be given according to the definitions stated in pricing policy (presented in Section 3.3.1). Anyway, even though the price range will be kept the same, it has not eliminated the problem of monitoring the prices and more importantly, the profitability. To this purpose, a specific pricing process implementation has to be formed according to the non-financial analysis.

Continuing with the second planning phase, the principles presented in the end of Section 4.1.2 are taken into account. In order to respond to these principles, those have to be examined one by one to determine how they can be taken into account in the new pricing process implementation. Hereby, Table 6 was formed.

Table 6. *The principles introduced in the previous Section 4.1.2 will be taken as a part of the enhanced pricing process by the presented solution.*

Principle	Explanation	Solution in the new pricing process
Feasible pricing monitoring	The new pricing process has to support the monitoring of the pricing	Revision of CRM system and check points needed in the pricing process
Price range	Has to be established	The current price range will remain the same
Sales support	The pricing process cannot burden the sales work	The pricing process will provide support to the sales work by reporting
Responsibilities	The pricing process model needs an accurate responsibility description	The action plan will determine the tasks on an individual level
Capabilities	All the people involved in the pricing process have to know the pricing policy	Planning price training of the Coordinators, technical training of the Sales Directors
Sales volume cannot decrease	The case company has to keep its growth level	The incentives have to be aligned with the strategic targets
System flow	The pricing process cannot lengthen the service lead time	The new process will not add any extra actions to the customer interface

As can be interpreted from Table 6, the principles define the requirements of the second planning phase quite accurately. *From the research question point of view, the most important principles in the pricing process are feasible monitoring practices and sales volume requirement*, because the new process by its monitoring characteristic is at the same time a necessity, but the processes should be built only if it enhances the company's overall success. There exists an experienced risk that the new pricing process decreases the sales motivation of the Sales Directors. This risk can be minimized by setting the correct incentives and providing the required support, which is also included in the principles. The other principles then, are something that relate to the success of the pricing process. Even though they are secondary principles in the pricing process formation, by those, an efficient pricing process can be taken in to use. Hence, they will be reflected partly in the pricing process implementation model, but more importantly, in the action plan, that will be introduced in the next Section 4.3.

After recognized the characteristics that the new pricing process should contain compared to the current one, the current pricing process models, presented in Section 3.3.1, were

taken under examination again. Then, the principles of the pricing process were taken beside the models in order to see, in which parts of the pricing process the possible changes should be targeted. So, the principles functioned in a way as filters to the current pricing process models. Through this kind of proceeding, the changes in the pricing process could be identified to concern the following parts in the model:

- Setting the objectives and analyzing key elements
- Implementation of the global pricing process
- Reward and compensation of the sales people
- Organization structure

As stated earlier in this Section, setting the objectives and analyzing the key elements experience changes in the new pricing process model, because the key elements were not defined due to comparative analysis, which was used as a basis instead. Setting the objectives were then aligned in a way that was described earlier in this Section: first conducting a comparative analysis of the pricing policy and price realization and then reflecting the results to the interview results of the Sales Directors. The objective setting, thus, relied on the financial and non-financial analysis, like the first planning phase suggested.

The implementation of the global pricing process, reward and compensation of the sales people, as well as organization structure are highly linked to each other in the second planning phase. This is because they all represent different controls in the MCS's package, which should be always integrated to each other if changing one part of them (Shimizu 2017, p. 2). Because it is a necessity that the implementation of the pricing process will shift to a more monitoring direction, changes have to be made to other parts of the pricing process as well. According to the non-financial analysis, both organization levels, Sales Directors and the Head of Sales seem to be ready for re-distributing the responsibilities within the team (Appendix E: 16th - 23th of April, 25th of April). *Therefore, the major change in the pricing process manifests in the pricing process by naming some territorial Sales Directors to monitor the profitability.* This would basically reorganize the structure of the sales department, because some of the Sales Directors will get more responsibility in their work and hence, the change can be reflected to Malmi's and Brown's (2008) administrative controls.

However, to make this kind of structural change in the pricing process, the other controls in the built MCS's package have to be aligned to this purpose (Shimizu 2017, p. 2). If some of the Sales Directors are being named to monitor the profitability, at least some part of their incentives has to be linked to the profitability. Therefore, the reward and compensation system is the other control in the MCS's package, by which the major change in the pricing process can be balanced.

The profitability monitoring in practice would then mean the same proceeding that the Head of Sales has been doing: giving a permission for the special prices under specific conditions. So, if a Sales Director experiences a need to make an exception in the pricing policy, she or he would have to check from the profitability responsible of the market area whether it is ok to provide extra discount. The profitability responsible then, would weigh the decision from the perspective of his own incentives, which are bound to the certain profitability level. More specifically, the Sales Director responsible of the profitability would have the profitability incentive linked to the profitability of the whole market area. So, the profitability responsible Sales Director would know the manufacturing costs and contribution margin of the products. However, while still continuing with her or his own territorial sales work, other half of her or his incentives would still remain linked to the sales volume.

This kind of solution might raise a question, why would not all the current Sales Directors have the same kind of incentive change in their work. This was not seen necessary at this point of time, because the company aims to a substantial growth and therefore, it is safer from strategic targets point of view to retain the current sales volume-related incentives mostly as they are. Also, because the financial measures did not show any alarming deviations, it is seen as a more natural solution to focus on the growth and volumes in selling, rather than generalizing the profitability monitoring for all. Anyway, in order to avoid a strong resistance to change, this kind of proceeding has to be reasoned to the members of sales department with the previously mentioned facts. To clarify the changes in the sales department, Figure 14 was formed. It illustrates the structure of the sales department by their incentives.

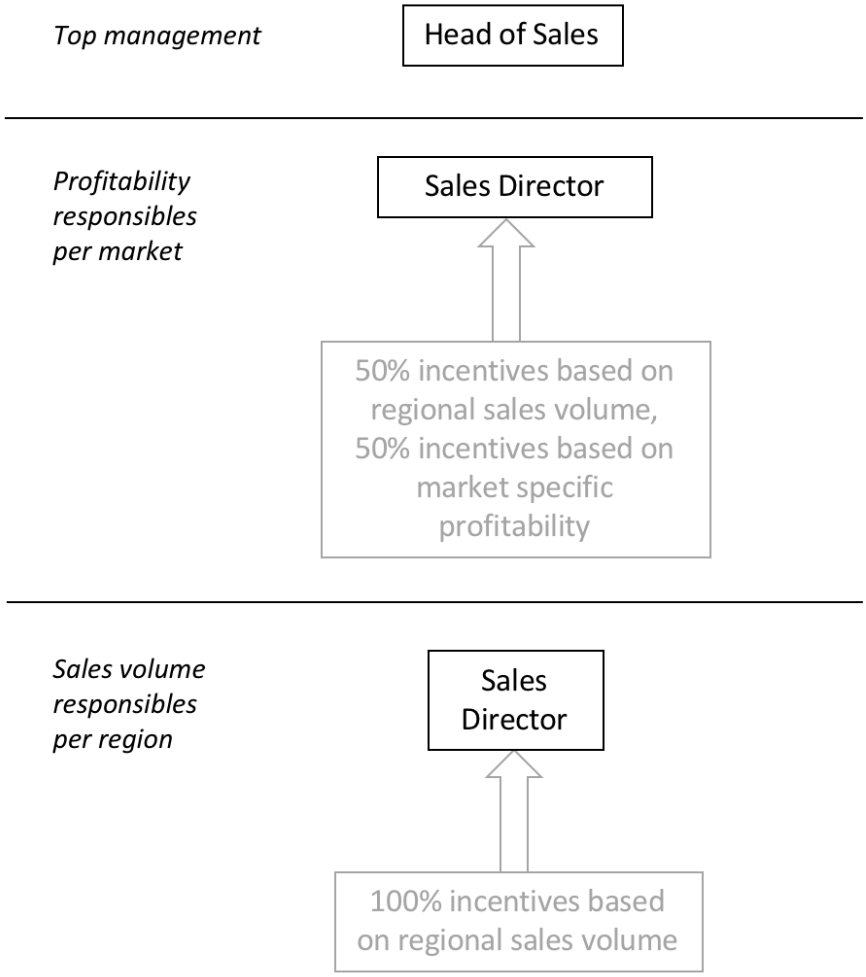

Figure 14. *The structure of the sales department in the new pricing process bases on the different incentives.*

As can be interpreted from Figure 14, the sales department would in the future consist of three levels, instead of two. The Head of Sales would be responsible for the total profitability and sales volume in the global market. Then, there are Sales Directors, who are responsible for the market-specific profitability, but also for territory-specific sales volume in their own territory. So, in a way, the profitability responsible Sales Directors would have two tiers of incentives: the other refers to whole market area, e.g. Europe or EMEA, and the other to a smaller territory, e.g. Finland or Scandinavia. Then the Sales Directors, whose incentives will remain the same, will keep receiving incentives according to their own sales volume of their own sales territory.

As a conclusion of the above discussion, the changes from the principles point of view take into account the sales volume-related principle as well as pricing monitoring, because the organizational structure and incentive changes create a so called checkpoint of the

profitability to the pricing process model. Anyway, it cannot be yet stated, that the monitoring aspect has been entirely taken account in the system, because it only concerns the Sales Directors internally, and not top management. Therefore, an additional checkpoint in pricing has to be created to the implementation phase.

While already sharing the profitability responsibility to the chosen Sales Directors, the actual pricing monitoring has to be integrated all the way to the top management via finance department. To this purpose, an after-monitoring checkpoint will be added to the implementation phase. This checkpoint was initially benchmarked from the Hwang's et al. (2009) pricing process framework. Besides the profitability analysis, the checkpoint includes a comparative analysis, similarly as presented earlier with the historical data in this master's thesis. Hereby, not only the Sales Directors who monitor profitability, but also the rest of the Sales Directors can benefit from the financial analysis. That is, the comparative analysis will help all the Sales Directors to monitor, how they have implemented the pricing and can they distinguish any regularities in the pricing deviations. Anyway, from the company's point of view, the most important key ratio levels in profitability and comparative analysis would be

- Company level
- Market level
- Country level
- Customer level
- Sales Director level
- Deal level
- Product level

Hence, the company would be able to make strategic decision, such as dropping a dealer or targeting the marketing to some profitable market area, based on the profitability key ratios. When the time evolves, the abovementioned key ratios could be converted in to cross-sectional measures. Consequently, the key ratios help the Sales Directors to analyze their own success in their work. By this far, they have only been provided with the realized amount of sales order prices. Anyway, this could be a long-term goal in the profitability monitoring. The key ratios would be followed by the top management of the company along with the profitability responsible Sales Directors, but the technical implementation to follow the numbers is under responsibility of the researcher of this master's thesis, which is again, an indication of the interventionist strategy position that the researcher has in the master's thesis project.

The after-monitoring checkpoint calls for a technical implementation, so that the price monitoring would be possible at any level. The technical implementation covers a number

of actions beneath it, as stated in Section 4.1.1. That is, the CRM system of the company does not classify the products in a level that the above key ratios would all be possible to implement. Moreover, the realized discounts are not marked to the system in a way that they could be traced in the system by referring directly to pricing policy. *So, these fundamentals must be built inside the CRM system before all the pricing monitoring key ratios can be built.* The action plan in the following Section 4.3 will fulfil the actions needed in order to reach the goal of the profitability monitoring.

By this far, the new pricing process implementation has taken into account the principles of setting the price range, feasible pricing monitoring and maintaining the sales growth. However, the pricing process still lacks the perspectives of responsibilities between the different departments, capabilities and system flow as well as sales support more specifically. However, especially capabilities and responsibilities are something that can be still affected by the pricing process implementation modelling.

As described in the non-financial analysis, two out of four people feel that the authorial issues hinder the pricing process flow, because the Coordinators do not question the deviating prices in the purchase order (Appendix E: 16th - 23th of April). This is inefficient work from the whole pricing process implementation point of view, because currently, also Sales Directors check the purchase orders in case of pricing. The other two of the Sales Directors then said, that the work between the Coordinator, them and dealer works out flawlessly because the Coordinators question the deviating prices and ask about them either from the dealer or from the Sales Director in uncertain cases (Appendix E: 16th - 23th of April). Hence, the practices within the pricing process need unification.

As stated in the interviews, the deviating prices in the purchase orders are usually a result of the unclear product specification (Appendix E: 16th - 23th of April). Therefore, the bottleneck in the pricing process is the work between the dealer and the Coordinator: if the Coordinator cannot calculate the correct price according to the product specification, wrong prices can flow to the system. In the worst case, the Coordinator would trust to the calculation of the pricing made by the dealer, which could be a wrong one. Hence, in theory, if the Sales Director would have provided a product with a too low price to the dealer, it could flow through the pricing process currently also, because all the Coordinators cannot question, whether the price is deviating or not. *Therefore, the new pricing process will suggest, that all the Coordinators will have an extra training about the pricing.* Hence, they would not only be able to check the prices relating to the purchase order document, but also check, whether the price follows the pricing policy. This way, the Sales Director would not have to check to purchase order by herself or himself, but to trust, that the purchase order is made according to the provided quote and the Coordinator

will make sure that the prices match the product specification and pricing policy.

Reflecting the Coordinator's checkpoint to the written principles, the checkpoint responses to the capabilities principle and system flow. The Coordinators, hence, have to receive support to the pricing. One partial solution to this will be the technical implementation of pricing in the CRM system, which will be built through this master's thesis solution. On the other hand, when unifying the practices in the pricing process, the system flow enhances, because it would decrease one action from the Sales Directors: checking the purchase order document.

By this far, this Section has described three checkpoints of the prices in the pricing process. In order to retain the agility and avoid further bureaucracy, more checkpoints are not being suggested to the new pricing process. If reflecting the suggested changes in the pricing process to the written principles earlier in this Section, it can be concluded that all the principles there are being considered by this far, excluding responsibilities between the Coordinators and sales department and sales support, because the solution for those ones will be more importantly presented by the action plan.

In order to summarize all of the above presented changes in to a new process model, Appendixes H, I and J were formed. The Appendixes H, I and J represent all the three different pricing formations, which were initially described in Section 3.3.1. *The changes in the pricing process relate to the additional sales department level, purchase order's approval or denial practice in the customer interface and the after-monitoring checkpoint, which includes comparative analysis and profitability analysis*. What is more, naturally, the key elements are excluded from the first phase of the pricing process, because the financial measures instead relied on the comparative analysis.

What is also entirely new in all three pricing process models is that the Sales Directors will document the deviating prices to the CRM system of the company. The document is basically an initial sales order record, to which the ultimate sales order prices will be linked when the purchase is received. In practice, the Coordinators always check if there is a document of the deviating price, when they receive a purchase order document from the dealer and doubt the pricing to be done with the basic logic. In fact, this kind of practice was taken in to use in the end of the timeframe of this master's thesis and therefore, it will be presented as a part of the solution. More importantly, this will be more precisely presented in the next Section along with an action plan.

Now, as the pricing process model was successfully formed, it can be stated that the second planning phase is successfully approaching its end. However, as said in the framework presentation in Section 2.4, the planning itself is not the purpose of any control. The

plans have to be taken in to use respectively and therefore, an action plan was formed to support the pricing process formation. The action plan is a necessity also because the responsibilities in using the pricing process have to be determined and the sales support has to be reasoned, so that the proposal also benefits the sales department. The action plan will be presented in the next Section 4.3. There, the practices of the pricing process model will be presented from the operations point of view. Furthermore, the rest of the principles from the Table 6 will be taken in to the action.

4.3 Taking the New Pricing Process in to Action

By this far, the master's thesis has presented the pricing policy and the pricing process implementation model, by which the pricing process can be monitored. Anyway, the model is not beneficial for the case company, if they do not know how to use it. Therefore, an action plan of implementing the pricing process has to be formed. This Section will present the action points of the pricing process implementation in chronological order. By proceeding according to the action plan, the company can get the full benefit and support of the drawn pricing process model.

The action plan, presented in Appendix K, is divided in to five different phases. First, the fundamentals of the pricing process have to be grounded to the CRM system in cooperation with the IT department. At the same time with the fundamentals, the system flow enhancing will be started by the responsibility sharing actions between the Coordinators and Sales Directors in the so called Coordinators' checkpoint. Second phase in the action plan focuses on testing the technical implementation. This is a necessary part of the IT development before taking it to use (Appendix E: 18th of May). The testing phase also includes the revision of the technical implementation if needed. Third phase is about building the pricing monitoring practice in form of key ratios to the system. The third phase is crucial also because it provides valuable information not only for the top management and finance, but also to the sales department of the company. The fourth phase will then introduce the new pricing process for the Sales Directors. Here, the Sales Directors will be named to monitor the prices and the technical support, tested in the previous phase, will be introduced to them.

At last, fifth phase, will be entirely based on the third and fourth phases, because it is about training the profitability responsible Sales Directors to their work. This is an important phase because, the Sales Directors by this far, only know the market condition and the customers from their own sales territories. If they are named to follow the profitability of the whole market area, they have to have an induction about the historical data of the area, whose profitability they are responsible for. Only this way, they can attain the

prerequisites to work in their promoted position. After the training, the full utilization of the pricing process model can start. Next, all of these phases will be presented in more detail.

First, the findings from the first planning phase was that the *fundamental product categorization in terms of different customization options* have to be built, so that the correct list price can be formed product by product to the company's CRM system. The other part of the findings from the first planning phase was that the *discount that corresponds the pricing policy should be technically documented to the CRM system* as well. Only that way the reasons for deviating prices can be followed: there should always exist a dealer- or case-specific reason for giving over YY% maximum basic discount. In some pricing cases by this far, the price has even exceeded the YY+Z% threshold of the maximum price limit. So far only the realized price has been entered in to the company's CRM system as a sole variable of pricing, which makes direct comparative analysis in the technical systems impossible. Figure 15 illustrates the idea of the technical implementation in the pricing in company's CRM system.

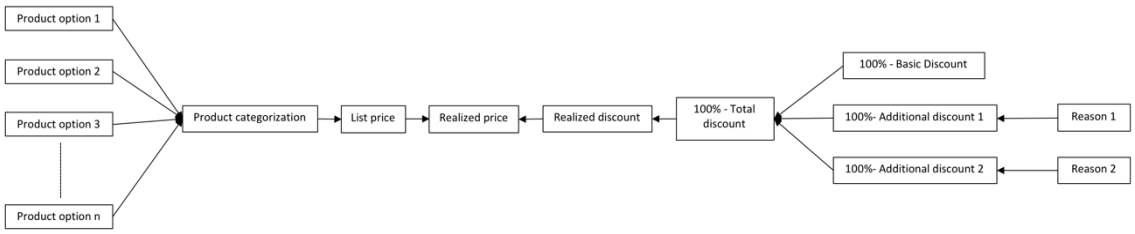

Figure 15. *The CRM system will form the realized price according to the product categorization and discounts.*

Hereby, the first action points in the pricing process follow the same structure than the pricing process implementation: before proceeding to make any changes in the MCS's package, the fundamentals of pricing monitoring have to be grounded. Thus, a product categorization by different pricing options has to be built into the company's CRM system, as Figure 15 shows. Without the product categorization, no analysis about the specific product types can be done or reported at any level. As a result of this kind of categorization, the list prices of the products can be documented to the system. Hence, option-specific profit margin information can be gained. In other words, the product categorization is a fundamental requirement from the accurate cost calculation point of view. Furthermore, this is important also, because this way the Coordinators could follow the price formation at the same time, when specifying the product to the sales order and further making an order confirmation of it.

In order to form the sales price from the basis of the product categorization, the given discount should be implemented to the CRM system as well. So, the solution suggested

in this master's thesis, as if, turns the price calculation in system point of view contrariwise: by this solution, the realized price will be an outcome of the system calculation, not a sole variable in the sales order record, as Figure 15 illustrates. Whereas the realized price has been added to the sales order manually by this far, the new solution would automatically calculate the correct realized price for the sales order. This kind of calculation in the system is a necessity, because only this way, it can be followed accurately, how the discounts vary in the sales records by different variables, such as high seasons or market area. Hence, the calculations would not have to be done with Excel anymore, as done in this master's thesis.

The discounts have to be documented to the company's CRM system in a way, that the different reasons for the price deviations can be linked directly to the amount of additional discount. This will be complicated from the CRM system point of view, because by the time being when this action plan was formed, it was not possible to add the information there, for which reason and how big additional discount rates were given upon the basic dealer discount, at least as informative and accurate level as the Figure 15 shows. So, the presented technical implementation will be a challenging and time consuming issue to solve and therefore, it is a placed to the top priority in the pricing process action plan. However, this master's thesis will not report the discount documenting in the CRM system more detailed.

Anyway, as stated earlier, the system efficiency could be enhanced still in the first phase of the action plan, because it does not necessarily require an IT implementation of the pricing. Here, the price training will be organized to the Coordinators. This master's thesis suggests, that the price training will be first offered to those, who consider needing it the most. Hereby, when later on, getting the IT systems in to use, all the Coordinators are able to test the new IT system and give feedback on its functionality. So, at the same time, the action plan prepares the Coordinators to work more efficiently in the pricing process but also, prepare them to give feedback of the CRM system, when an automated pricing functionality have been added to there.

Including also in the first phase of the action plan, the responsibilities per each pair (Coordinator-Sales Directors) will be personally shared by a *pricing process extension and responsibility form*, which are presented as Appendix L-M. The responsibilities cover the purchase order handling phase in the pricing process, thus, eliminating the need from Sales Directors to check the specifications on the purchase order document. The responsibility form especially separates the responsibilities when it comes to deviating the prices and documenting it to the CRM system. This way, the pricing process practices internally in the company can be unified, but the most detailed practices, which refer to reporting

the deviating price correctly, will be done as agreed between the Coordinator and Sales order personally, as the Appendix M shows.

As stated above, the documentation of the deviating prices will be this way also taken account: in uncertain pricing situations, the Coordinator always checks, whether the Sales Director have made a documentation of the upcoming, deviating, price. All the possible pricing situations from the basic and deviating prices point of view are presented in the extension of the pricing process model in Appendix L. The extension of the pricing process illustrates all the paths, by which the purchase order will end up to the system as sales order record. The responsibility form then, helps to share the responsibilities in the documentation phase: each pair of the Sales Director and Coordinator would have to commonly agree, how they separate the documentation, if it seems that there is some inconsistencies when referring to the purchase order.

So, the documentation made by the Sales Director alone leads the Sales Directors to "note" the Coordinators about the special pricing, which might decrease the enticement to provide lower prices in the first place, as it ends up in Coordinators checkpoint. So, as above presented, the documentation of the deviating prices decreases, or even eliminates, the need for checking the purchase order from the Sales Directors' side. If the price is correct in the purchase order, it is always either documented, or correctly calculated to the purchase order or by the Coordinator.

Reflecting the responsibility form to the pricing process training, it is also a necessity that the Coordinators who do not yet know the pricing that well, will gain knowledge about it and this way, can follow the extension of the pricing process and responsibility form in a way they are. When working in the customer interface, it is a self-evident requirement that all the Coordinators know the pricing policy and are able to serve the dealers in terms of pricing. Therefore, the training is an emphasized aspect of the pricing process in the action plan.

Second, when the fundamentals of the pricing process are being based, *the testing phase* will check, whether the IT system about the pricing really work. This can be done in the test environment of the IT systems. The people involved in the testing are IT and Coordinators in priority, because Coordinators are the ones that can note the flaws in the system, because they have the training for the pricing and also, they use the system on daily basis. Besides them, the finance department will also take part in testing by making initial cost calculations about the product options. What is more, they will ensure, that all the measures in the pricing process are compatible with the company's reporting system. All in all, the testing phase basically includes the daily use of the current CRM system, with new features in it.

When taken account the Coordinators and finance department's testing feedback, the possible revisions to the technical implementation of pricing can be done. When the possible revisions have been done, the testing phase can be stated to be implemented. Until this point of action list, the whole utilization of the pricing process has not been in used but in the next phases, the actions to the organization structure and pricing monitoring will be taken.

Third phase means *building the monitoring practices in to the technical system*. These practices will be built to the systems by the researcher of this master's thesis and the implementer of the monitoring practices is naturally the IT department of the company. The key ratios of monitoring will be based totally on the first and second phase of the action plan, because only by them, the correct measures are formed to the system. The key ratios will cover all the levels that were described in the elder Section 4.2: company, market, country, dealer, deal and sales director and product levels.

The measures will monitor the pricing by the manner of comparative analysis and profitability. When the time evolves, the cross-sectional analysis can be built as well. This way, not only the Sales Directors, who are responsible of the profitability, but also other Sales Directors will have vital information about their pricing realization in the markets. Hence, the key ratios will not only offer new information from the profitability point of view but also, let's all the Sales Directors to review afterwards, if their prices seem to have some regular deviations, which they could affect to. Hereby, the pricing process implementation do not only affect the top management, but also to the Sales Director's work.

Consequently, here also the initial objective of this master's thesis will be implemented: building key ratios of the profitability to the top management. So, the top management will be also provided with comparative and profitability reports in this phase. They will have the same view of the profitability as the profitability responsible Sales Directors.

The fourth phase then, *will introduce the new pricing process structure to the whole sales department and other operators in the pricing*, such as the Coordinators. More importantly in this phase, the Sales Directors are being chosen to follow the profitability in each market area. This master's thesis will not take stand for who and how many of those should be, because it is the decision of top management and it depends on the recruitments of the case company. However, it should be noted that there cannot be too many of the named ones per market area, because if there is, the settlement might create competition internally about the discount sharing. Anyway, as basic information, the finance department should provide a calculation to the Sales Directors, which tells, how the profitability of the company changes when providing bigger discounts to the customers. This way, the objective of the top management can be reasoned to the Sales Directors, when they start

with totally new responsibility area in their work. This kind of proceeding relates to extent of transparency in the company, which was stated to be a vital act if aiming to motivate and commit employees (Wouters and Wilderom 2008).

In this phase also, the pricing process model will be introduced together with the monitoring practices reports to all the Sales Directors. Hereby, the named ones can have a possibility to familiarize themselves to the whole market's profitability in different levels and thus, make decisions about the profitability from that time onwards reasonably. This way, they will also reflect their decisions on the top management's profitability objective, which the finance department reasoned by the product profit margin calculations. Summarizing this, *naming the Sales Directors is not possible earlier, because they need the support from the historical data and they have to have a possibility to reflect and combine the new coming data to already existing analysis*. After the fourth phase, the pricing process model can be stated to taken in to use in full potential.

The fifth phase then, will train and support the Sales Directors in their profitability management work. To this phase, there includes basically further training of the IT systems and gaining feedback about the key ratios. Particularly in this phase, it is really important to pay attention to the gathered feedback and continuous improvement of the monitoring, so that the Sales Directors have the perquisites to do the monitoring. Also, in the feedback phase, it would be especially valuable to go through the feedback from the Coordinators checkpoint as well, which handled the responsibilities between the teams, so that the barriers in implementing the responsibility form can be identified, if there even exist a bottleneck after the implementation.

To conclude the fifth phase, it cannot be said that the pricing process model is "done", when the feedback has been gathered and reflected with the system. More importantly, the fifth phase will be implemented in the pricing process on the continuous basis. So, whether it was two weeks or years later, the pricing process itself should be always monitored by the feedback that it receives. So, whether it was a pressure from the key elements or managing the checkpoints or adding a new key ratio, the fifth phase always takes a note to the given feedback and aligns the pricing process to its purpose.

5. DISCUSSION

5.1 Overview to results

Throughout Sections 3 and 4 the master's thesis has reflected the acquired quantitative and qualitative data to the built literature framework. In this Section, the results will be weighed against case related questions, which will establish the usage of the pricing process model from other perspectives as well. More specifically, the built theoretical foundation of the research will be examined by using triangulation as a methodology: the different questions will be confirmed by the perspectives of different authors and research fields, which in this case are pricing process and MCS's package. Then, the results are being compared to the results of this specific case in the master's thesis. As a result, the limitations and the future research needs can be assessed.

The basic theory of this master's thesis consisted of the pricing management and pricing process literature. However, since the objective of the pricing process was to control and monitor the profitability, MCS's package was taken into the review with pricing. Anyway, the literature did not provide a hint as to how the different controls in MCS's package are linked to each other when it comes to different business cases. This question will be analyzed based on the literature and the master's thesis case results next.

Whereas Hinterhuber (2004) presented the fundamental theory for building the pricing process, Malmi and Brown (2008) presented that processes and procedures are included in the administrative controls of the MCS's package. Hwang et al. (2009) in their empirical research presented that pricing monitoring should be done throughout the pricing implementation process. So, the process model presented by Hwang et al. represents an administrative control, in which pricing appears as a topic. Then, the process itself includes financial measures, which are included in cybernetic controls and by which the topic can be measured.

> *So, the linkage between the pricing process and MCS's package is the focal research topic and the goals related to that specifically.*

When the improvement goal of the business dilemma has been found from the research topic, the other controls in the MCS's packages can be recognized. So, in this case, the *process* was not necessarily the only way to reach the pricing related objectives. However, it was kept as an assumption in this master's thesis.

Concluding the above, the research question could have also been positioned as "How

should the case company follow the pricing?". This way, the pricing *process* would not have been determined as an objective already in the beginning when starting the research project. Because the researcher was working in an interventionist position in the case company while conducting the research, the research question positioning was easier and the accurate literature topics could be found to match the case directly in the beginning of the project.

To summarize the above, to succeed in planning an administrative control, the objective of the outcome needs to be defined as accurately as possible already in the beginning of the project. This statement is also verified by Simons (Bisbe and Otley 2004: 1995, p. 109) who suggested in the literature review that the control system has to always be used interactively. Not surprisingly, Hinterhuber (2004), Skouras et al. (2005) as well as Malmi and Brown (2008) all stated that the objective setting is the first step when starting to plan a process. If the researcher would not have defined the need for a process in the beginning of the research with the different departments of the company, the usage of the controls could have been different: the emphasized controls would have been possible to choose some way other.

> *Now, the researcher succeeded in defining the process needs as tactic ones, in order to respond to a strategic, long-term objective, profitability, by taking into account both, sales and finance departments. This way, both departments could be committed to the pricing process implementation planning as well.*

The above discussion still raises a question of how the researcher could verify, that all the aspects in the MCS's package have been taken into account, because the built framework in this master's thesis delimited out some parts of the Merchant's and Van der Stede's (2007) as well as Malmi's and Brown's (2008) MCS's packages. As stated above, the linkage between the controls relates also to the topic that is handles, which in this case was pricing management. Because the pricing management was not seen to be dependent on the company's internal symbols or norms, but the external market, the cultural controls were considered irrelevant. The same thing also applied to the personnel control presented by Merchant and Van der Stede (2007, pp. 83-84): the characteristic of the people recruited in the company was not seen as a factor when considering the profitability monitoring.

However, it could be claimed that the output of the research was a hybrid measure, because the action plan of the pricing process combines the financial and non-financial analyses (Malmi and Brown 2008). In practice, this means that the pricing process functions as a standard for people to act accordingly and the results to emerge as desired by top management. Based on the results that the action plan provides, i.e. the price deviations

from the comparative analysis and profitability measures, variance analysis can be conducted. The feedback loop, then, is realized through the checkpoints of different operators in the system. By the variance analysis of the feedback, the action can be changed in the pricing process if needed (Green and Welsh 1988).

Also, budgets of the cybernetic controls, presented by Malmi and Brown (2008) would have been studied from the case point of view as well. In fact, those have a remarkable role in pricing: the made budgets always affect the profitability of the company, because they estimate the costs. As stated by Spaller (2006), the operational director of the company always acts according to the calculations made by the finance department. However, since this research topic was about examining the profitability monitoring, this statement reasoned the importance of the profitability monitoring rather than implicated a research perspective.

So, it is entirely case-specific, how the linkages in the MCS's package set and which controls should be utilized in different cases. The more accurate description of the objectives can be reached in the early stages of the planning, the more accurate the usage of the MCS's package is. For example, if desiring to develop the event organizing routines in a company, first, the developer may suggest that tactic planning, hybrid measures, symbols and procedures may provide sufficient tools for the project. The company's internal departments, for example marketing and sales, if it is about some commercial event, will give their objectives on the event organizing. This way, other controls can be taken in to the consideration or some of those left out. As a result, an MCS's package can be formed to the specific event organizing purpose.

Now that the pricing process has been discussed from other controls points of view, the discussion leads to deliberate the usage of the two-phased planning framework from different angles. First, it would be interesting to discuss, does the industry have an effect the built pricing process usage. In other words, if the pricing process would have studied in some other case company from different industry, how the built framework would have been different? This kind of question burdens the proposed solution by discussing, how the process model would have been different if the empirical analysis would have provided totally different data.

Because the case company represented an industrial B2B product manufacturer, which sells product units, it is worthwhile to contemplate, whether the pricing process framework would suit other companies selling for example services or projects. The presented Figure 6 in Section 2.4, *the first planning phase*, does not specify the focal offering from the pricing point of view. Therefore, CVP analysis, customer value and competitor analysis can be applied to any company.

In practice, this means that the framework of the first planning phase could be applied to all the industries, where the customers do the decisions based on the customer value.

Hereby, it does not matter, if the offering of the company using the framework of the first planning phase is from the service or project business or some other sector. The first planning phase also emphasizes the importance of compromising the different objectives of the pricing. As it was stated by Smith and Nagle (1994), the objective of the finance department is usually, regardless of the industry, to get as high margins as possible for the offer. This was also verified by the empirical literature review, where according to Shim and Sudit (1995) the cost-based pricing covers 80% of the manufacturing companies, without taking into account the external market or other qualitative components of the pricing. Even though the number implicates results only from the manufacturing industry, it implicates that the costing aspects seem to have a supremacy in the internal objectives. On the contrary, the sales departments of the companies usually desire more price elasticity and offering as low margins as possible (Smith and Nagle 1994, Hinterhuber 2004). Related to that, it became clear also by Malhotra's (1996) research that only 2% of the total marketing research cover pricing related topics. This indicates the fact of marketing aspects being in lesser focus when it comes to determining the price.

All the above discussed articles, except Shim's and Sudit's (1995), did not bound the internal objectives to specific industries. However, their article did not repeal other industries from the internal objective examination, but verified the cost calculation being in greater emphasis. So, it could be still claimed that either of the internal objectives do not restrict the usage of the first planning phase to any specific industry. As a conclusion, it seems that the costing perspective in pricing seem to have a supremacy in academic literature, which indicates a fact that in general, more support should be targeted to the sales department in pricing related researches.

However, this master's thesis has contributed to this by proposing process models, an action list and a responsibility form as tools to support the sales department's daily work.

Anyway, it would be interesting to apply the first planning phase to B2C markets as well. Basically, also in that case the objectives and the key elements could apply, because the focal market is generally very price driven and there exist many competitors, which cause pressure on the financial department to decrease the prices. Even though the market acts by price driven behavior, they can still be affected by customer value with successful marketing. Concluding these arguments, the first planning phase could also be used to B2C markets. However, if the first planning phase would be applied to public sector, it

would not necessarily work, because the customers do the decisions purely according to the cheapest option they have. Also, the first planning phase could not be applied to a monopoly market, because there would not exist any reference offerings at the same market. Furthermore, since the top management's objective relates to profitability (Smith and Nagle 1994), the pricing process has to be applied to a company that aims to reach profits by its business.

What comes to second planning phase, Appendix A, it does not determine the revenue model of the focal company nor present the accurate quoting procedure, which would delimit the pricing process usage. What is more, in every deal of B2B market, the prices and the commercial specifications will be always negotiated in some way, whether the ultimate agreement would be written or oral.

> *Therefore, it could be claimed that all the phases in the pricing process can be utilized to any B2B company's practices, not only a company that sells industrial product units.*

The second planning phase, however, could be not claimed to apply to B2C markets, unlike the first planning phase. That is, the price is always the same for every customer and the prices cannot be negotiated. So, the pricing process implementation model can be only utilized in B2B companies and industries. As a conclusion, the processes in B2B and B2C differ, which is why their MCS's packages are not comparable to each other. Basically, the second planning phase could still be applied to the public sector, because it does not define the accurate quoting loop nor present a detailed structure of the organization in the pricing process. Besides that, the pricing process aims to capture profits, which is why the pricing policy cannot be applied to for example volunteering or other non-profit industries. In these cases, the content of the phases in the process would have to be changed to match their purpose.

Besides the industry point of view in pricing process usage, the global point of view in the built pricing process would be interesting to assess. As a main goal, this master's thesis aimed to build a pricing process for a case company that does global business. From the pricing process usage point of view, it is beneficial to assess, whether the pricing process could also be applied to the national or local companies. This way, the pricing process usage could be established in the local business units or other groups of the company.

As stated by Skouras et al. (2005), global pricing relates to defining the different customer value in different markets globally. Therefore, more profits can be captured in the markets that are willing to pay more for the product. According to Hinterhuber (2004), the pricing

should be determined by the price level of the reference product and the customer value that the company is capable of offering upon the reference. This definition was also supported by Pfäffli and Michael (2013) and Töytäri et al. (2017), who all represented some dilemmas related to these key elements in their research. The basic theory of the value-based pricing would apply to national or local companies respectively: despite the fact that there is only one market, the reference offering and the customer value could still be utilized when determining the price range.

In the context of this master's thesis project, the company already had one price level for the product globally, which was a surprising finding in the light of the theory provided by the literature, as presented above. So, even though the definition of global pricing was linked to the multi-price level, the empirical analysis showed that it does not necessarily define the process itself as global. In the context of the case company, the product is customizable, which is why the price can be modified in the different markets and hence, the product, as well as the price, varies. On the other hand, the customization prices are the same for all the markets.

> *As a conclusion of the multi price levels, the components of the price, i.e. the key elements of pricing, have to be taken into account, even though they do not necessarily lead to variable price levels globally.*

If assessing the second planning phase as a whole from the global point of view, it does not include or exclude any specific characteristics of the pricing process that would directly link the model to specific geographical scope. However, it still assumes that the company has at least three different levels in their hierarchy, in which the pricing can be implemented. As described in the model description, it is crucial to have different operators involved in the profitability checking.

> *So, the pricing process model could be applied to companies that have a minimum of three different people in the pricing process implementation. Thereby, the model could be applied to local, national or a global company that have this kind of specific structure.*

Now when the built planning phases have been discussed from the industry and global points of view, the last question related to the framework usage itself would be, how the maturity of the company affects the pricing process usage. According to Su et al. (2015), the companies that are experiencing high growth at the market use MCS's packages in their daily work. What is more, Lancioni (2005) stated that the companies often use pricing as a way to adjust the volume rather than as a component of the profitability itself. So, the companies that focus on high growth from the revenue point of view, easily forget

the profitability aspect in the daily work. These two arguments seem to have a contradictive approach to monitoring profitability by the pricing process, because the growth companies usually tend to use the MCS's efficiently, but they still end up focusing more on the growth rather than the profits.

The built pricing process, however, was initially based on the profitability aspect, which might be a sign of maturing from the company's internal point of view. In fact, Su et al. (2015), who used the term *growth company*, a little bit misled the discussion about the certain companies using the MCS's more actively than the others. In fact, the usage of the MCS's package is not dependent on the external market and the company's growth in there, because neither of the used MCS's package theories presented the theory in such a way. However, the growth scales up the usage of the controls, because the personnel count is being multiplied by the growth. So, a more describing word for a growth company, that Su et al. presented would be a start-up. This can be also confirmed by their statement "those companies usually have higher perception of innovations and they experience a higher uncertainty in their business". Anyway, a growth company does not necessarily mean a high uncertainty in the business. Start-up companies, however, are usually linked to business innovations as well as high uncertainty.

The case company of this research could be classified as a growth company, but not as a start-up anymore. Therefore, the company already had a pricing policy and a viable pricing process, which was just missing some parts that they desired to enhance. If the research would have been done some years back, the initial process description would have been complicated, or even impossible to make, because few years ago, the case company could still have been classified as a start-up company. Back then, the aim of the pricing process would have possibly been something other than profitability. Anyway, a company that has been doing business for many decades might not have that substantial benefit of the built framework, because the long-term business fundamentally is based on the profitability, which is the reason to the existence of old companies. So, those have most likely employed the tools of profitability and pricing management.

If examining the built framework from the bare process model point of view, the practices provide quite a fundamental and basic approach to pricing process building. However, the built action plan provides deeper perspective on the pricing process usage. The action plan itself could not be directly applied to a start-up company, which does not have resources to implement a comprehensive CRM system or organize trainings. However, the action plan would not serve matured companies either, because the action plan kind of represents a procedure of "short-listing".

This is because, by the built key ratios in the IT systems, the company is able to

identify valuable and less valuable players in their dealer portfolio.

For example, if some dealer is constantly decreasing the profitability of its deals, the technical implementation helps to identify it in the early phase by the results. Especially when the company relies on organic growth, the impact of the profitable dealers is substantial. Therefore, the action plan would not bring any new information to the matured companies, because it could be expected that those companies have already taken the key ratios to use earlier.

As a conclusion of the above, the action plan provides a viable tool for companies, which have a big growth potential but have not yet utilized all the possibilities at the market.

Another question worth discussion is how the objectives of the finance department and top management differ. In this project, the representative of the top management, CFO, was the main supervisor from the company's side. Similarly, the Head of Sales represents the top management of the company, which is why the profitability aspect of the pricing process came very clear in the beginning. Whereas the Sales Directors wished to reach more price elasticity in their work, the perspective of the finance department in general was not studied from other than the management point of view. Therefore, it is interesting to deliberate what stance the finance department would have taken towards the pricing process research if they had been interviewed.

As stated already many times in this master's thesis, according to Smith and Nagle (1994) the objective of the pricing from the finance department point of view is to reach as high margins for the products as possible. As mentioned above, in this case, the objective of the finance department appeared as profitability. If the researcher would have interviewed for example other specialists in the finance team, the objectives would have pointed out some other aspects.

From their perspective, the monitoring actions would have most likely been emphasized, because they are responsible of the total business analytics of the company and of the reporting as a whole from a finance point of view.

That is, the comparative analysis generates very crucial information to them and helps to reason the given results by different levels of key ratios. What is more, the need for technical implementation would have most likely risen as another topic because the finance department needs tools to carry out internal cost calculations and the demand of different options and the impact of seasonal variation.

As a conclusion of the above, the objectives of the finance department, excluding top

management representative could be assumed to relate to the monitoring itself, at the same time when the pure goal of the monitoring would be to refine the data and provide crucial information to the company to enhance its sales. If the key ratios can be successfully built, the finance department may gain for example information of the certain market and its most popular customized products there. This way, the company could start targeting certain marketing and sales activities to there in order to push the sales. Contrariwise, if some market could be seen always pushing the prices down, they could be marketed and provided always with the cheapest option of the product or setting a new pricing process objective to that market.

Anyway, the profitability controlling actions seemed to function optimally when shared within the finance, sales and coordinators departments because the Sales Directors have the best knowledge of the market information and therefore, by combining the key ratios to the actions that they observe in the field, they are able to directly affect the pricing actions in their own work.

> *What is more, knowing the key ratios and having experience on the daily sales work, the Sales Directors are directly able to reason the pressure of changing the prices if that comes up as a topic.*

Even though the aim of this master's thesis was to examine how the profitability can be managed by pricing, there are many other components that affect crucially on pricing also. Therefore, a fair discussion of the profitability would be, what other ways are there to affect the profits at different levels. According to the built framework, the operators in the pricing process are top management, sales people and coordinators, who manage the orders. Whereas the task of the top management is to set the price range, as stated by Hinterhuber (2004), the sales people and coordinators can affect the profits in many other ways than just implementing the pricing.

If measuring the profitability only on company level, the easiest way would be to assess the cost structure of the company and determine the costs that the individual can affect. As Spaller (2006) stated, the operational managers guide the actions of the company, but the question is, what are these actions. The easiest way to affect the profits is to aim to shorten the lead time of getting the orders in, because the costs of handling the orders is included in the income statement. So, the sales people could pay attention to the hours used in getting the order and similarly, the coordinators could measure the time they have put in serving the specific customer and specific order. Even though the principle of shortening the lead time in Section 4.2 was not initially a profit-based goal, it may still affect the profits crucially. So, the key ratios are not the only measure of the profitable dealers. However, this kind of time consumption per order is really hard to follow and would

burden the pricing process implementation too much, which is why the principle of the lead time was only taken into account in a way that it cannot be lengthened.

Other than the lead time, the income statement also includes other expenses that could be affected to. The company may have for example yearly maintenance expenses from the systems they use. As this master's thesis provided a tool to monitor the pricing by the technical systems of the company, the research work could be calculated to these expenses. As a conclusion, if any of the operators in the pricing for example makes a market research on the potential customers or otherwise further helps the company to gain sales and profits, it directly affects the profitability.

In order to raise the profitability on a daily basis, the built framework also has to be taken in to use efficiently. According to Wouters and Wilderom (2008), the experience-based development processes, in which the pricing process can be included in, are more eagerly being used, if transparency is supported in the company. In practice this means that the companies that support transparency have to provide tools and possibilities to see how the required controls affect the company's success from the employee point of view.

> *As a summary of the above, the companies using the built pricing process framework have to provide the information to the employees, so that they can note the effects of their work in the company's success, which in this case relates to profitability.*

This statement was also supported in Simons' (Bisbe and Otley 2004: 1995, p. 109) and Su's et al. (2017) researches, where the MCS's package usage should always be done with an interactive emphasis. This was also rather similarly noted in Section 4.3 from another point of view: when making structural changes in the organization, the changes should be reasoned to the employees involved, because the administrative controls together with cultural controls define the basis for the whole company's MCS's package as a whole (Malmi and Brown 2008).

> *So, if providing valuable information for the Sales Directors in their work, the built framework would function as an inspiration for development in sales department, which would lead to sharing best practices interactively, which in the long-term, affects on the profits positively.*

Continuing the above, it seems that the Sales Directors could be motivated by easing their work: this arises from the facts that they usually desire to have more price elasticity and the more information that they can have, the more committed they are to following and utilizing the controls. So, the incentives related to pricing process have to be at the same

time reachable but also, when it comes to profitability, the maximum incentives should always be reachable by using the price range set in the pricing policy. That is, the sales work always aims at agreeing a contract with the potential customer, which is usually signed for a long-term period. The motivation of the Sales Directors is at a risk, if the incentives would require utmost exertion or seemed not likely to be achievable in the frames of the pricing policy.

At last, some criticism has to be presented towards the built framework, and therefore a question to be assessed is, what risks does the built pricing process have? At the same time when the question leads to assessing the limitations of the made research, it reasons the limitations. Töytäri et al. (2017) presented a number of challenges and limitations related to pricing. Most of them were identified through the empirical findings in a form of principles, which is why the research could be referred to a strategic planning. Anyway, some of the challenges presented by Pfäffli and Michael (2013) could be linked to the risks that the built framework may have. One of them is, that there exist risks that the market cannot be segmented, resulting in the value being hard to communicate to the customer.

So, the risks in this solution are related to the data utilization from the company's CRM system. Actually, the pricing process presumes, that the company, whether the case company or some other, has a viable system where it can export the data for analysis. So, since the pricing relates to evaluating the reference offering and the competitors, the segmentation according to customized products and their demand per market are crucial information to the company. If an error or a fault exists in the system, the segmentation is not possible, which leads to impossible market segmentation and thus, communicating the customer value is not possible.

Other risks in the pricing process could relate to cultural controls and reasoning the control usage to the employees. According to Wouters and Wilderom (2008), the experience-based control, which the pricing process represents, needs to be reasoned to the employees that they concern. For example, if naming some people to monitor the profitability from the sales department, as the action plan presented in Section 4.3 suggests, it may hurt the company's cultural controls, which are bounded to the values and norms of the company (Merchant and Van der Stede 2007, Malmi and Brown 2008, Shimizu 2017, p. 7) and create tensions between the members in the department, because the reasons behind the changes are not explained. In this case also, transparency in using the controls is in a key role (Wouters and Wilderom 2008).

In the worst-case scenario, it would lead to a problem where the Sales Directors, who have their incentives bound only to the sales volume, will not ask the deviating price

"permission" from the profitability responsible Sales Director. Hereby, the prices would start to behave according to the interdependencies of the sales department, not according to the market. Similarly, it could be that the Sales Directors who are responsible of the profitability per market area, would only favour their own sales territory by permitting more deviating prices there. In this case also, the price deviations would start to focus to certain Sales Directors' market area for the wrong reasons. What is more, there cannot be too many profitability responsible Sales Directors per market area, because it is no use to create internal competition between the Sales Directors about the profitability. This would also hurt the company's values, which are part of cultural controls. Other than the culture, an internal competition in profitability could affect negatively in getting the order in and push the prices down unreasonably, which would in the long-term effect the company's profitability.

5.2 Limitations of the Research

After discussing the built framework from different angles by different case related questions, the next discussion of the tentative framework relates to limitations that the research had. By this kind of discussion, the weaknesses of the framework can be assessed as well as the data gained by the research can be assessed from the framework point of view.

As it was stated in Section 1, the pricing process delimits the perspective to sales department in terms of incentives. So, the top management's, finance department's and the coordinators' points of views were not analyzed in this master's thesis and therefore, their individual motivations have not been taken into account in terms of profitability. So, the pricing process lacks the perspectives of the other operators in the pricing process, because it does not take into account the individual motivations of the coordinators, finance department and the top management, even though in top management's case it is more obvious since they are assumed to have personal interest while being in the head of the company.

Another case related limitation was the longitudinal, limited, timeframe. By restricting the analyses to the specific timeframe, some aspects had to be delimited out. For example, the CRM system of the company experienced continuous changes throughout the master's thesis project, which is why the examination of the system was delimited to the stage where it averagely was when the research was conducted.

Other limitations of the research relate to the literature foundation. The used sources of the framework affected directly on the perspectives that were analyzed in the pricing process formation. The pricing process relies entirely on Hinterhuber's (2004) framework, but the process may have been different, if for example Shipley's and Jobber's (2001)

framework of the pricing process was used. However, the benefit of using Hinterhuber's (2004) framework relates to the key elements, which were crucial to understand because of the dynamic nature of global price range formation. Due to the delimitation of this research project, the MCS's package was carried out by a dialog of Merchant's and Van der Stede's as (2007) well as Malmi's and Brown's (2008) researches of MCS's packages.

Based on the choices made in the literature, it could be criticized, whether their MCS's package provided a comprehensive basis for researching the controls. For example, the used MCS's packages did not provide purely motivational aspects of using the controls. The only way that the literature let the researcher analyze the pricing was related to the reward and compensation control. Therefore, the limitation of the research was that the researcher did not know much about the motivational aspects. All in all, it can be stated that there exists high uncertainty related to the tentative framework, because of the limited sources in the literature framework.

What is more, the used literature in the pricing process and MCS's packages were relatively old, most of them published over ten years ago. However, since the pricing as a research field does not develop from academic point of view too rapidly, all the researches published during the 21st century were considered relevant at time when this research was carried out.

6. CONCLUSIONS

6.1 Meeting the Objectives

The pricing process research responded to one primary research question and two secondary research questions. The goal of priority was to define, what type of global pricing process would suit the case company and how should it be implemented in practice. Secondarily, the aim was to make an overview, how the products of the company had been priced and what are the major lacks in the current pricing models. Based on these topic and objective definitions, a literature review was conducted. The literature review consisted of the Hinterhuber's (2004) pricing process research as well as Merchant and Van der Stede's (2007) and Malmi's and Brown's (2008) MCS's packages. As a combination of these two topics, in which the Hinterhuber's (2004) research worked as a founding theory, a tentative framework of two planning phases were formed.

The tentative framework was then utilized in the case company's business dilemmas, which were presented above in a form of three research questions. The empirical study started with an initial data overview, which was simply conducted by a listing of the topics that the researcher knew. Then, the data gathering continued with an objective driven and pragmatic data gathering and refinement, where both quantitative and qualitative data played an equal role. This way, the conclusions made from some extent of the research data led to the next data analysis. On a regular basis, the research data was compared to the built literature framework and to the objectives that were set in the beginning of the project. This way, the reliability of the research was ensured.

When the data was gathered, it was noted that the built tentative framework did not match the current case from all of its aspects. The difference between the built framework and the empirical analysis was that the case company did not call for key element definition, because the pricing policy was already determined. The core interest was to define, how to use the policy that they have. However, this goal was initially known when starting with the objective setting, but the theorem of the global pricing formation is necessary to understand when building a pricing process. Though the key elements played a meaningful role in the first planning phase, in this case, it was used to help to form the interview structures (Appendix F). What is more, it helped to find out the motivation of the Sales Directors and if they experience any pressure resulted from the price ranges that they have been given.

What comes to the first research question, the comparison of tentative framework and

empirical results taught that even though the sales and finance departments of the company had their contradictive objectives, they can be still satisfied with their work if the objectives are compromised by a reasonable solution. To this purpose, not only the pricing process models but also action list and a responsibility form were built to help implement the process on a daily basis. What is more, this kind of planning helps to commit all the operators in the pricing process to the work, because those previously mentioned tools help to define the responsibilities in the team interfaces.

The MCS's package usage refers to the extent that the operators are motivated by them (Wouters and Wilderom 2008). The controls are built to ease the work, not to complicate it. So, when forming a control, the motivation of the users has to be ensured. *In this case, it was more important to retain the motivation of the Sales Directors, rather than keeping the process building as an absolute goal.* In this case, referring to first research question, "suitable" pricing process meant to find a process, that can at the same time motivate the Sales Directors and bring the different teams closer to each other, in order to obtain a mutual goal, profitability.

In consequence of the above and as a unique observation of the master's thesis, it was noted that the price elasticity objective is not a driving force in all cases, even though it was presented so according to literature, in daily sales work. More importantly, in order to reach strategic goals, objectives of finance and sales departments need to be assessed from the tactic point of view by reflecting different measures, which in this case were comparative analysis and semi-structured interviews. By this kind research methodology, this master's thesis proved that the profitability can be retained through sales department's support, rather than focusing only monitoring and controlling the pricing through key elements. Same kind of results have not been published earlier in the field of pricing process research, which is why this master's thesis contributes to the academic pricing research with a special, sales-centric, emphasis.

What comes to secondary research questions, it became clear that one major lack in the current pricing process is that the interface of the operations in the pricing process is not determined well enough, which is why the responsibility form was a necessity. What is more, the technical implementation, which covers product categorization by its options and shared discounts per product, was noted as one of the main hindrances in terms of profitability monitoring, which is why the action list had a notable impact on the implementation of this kind of process.

The other secondary research question, which was related to the pricing implementation, implicated a result that the products of the company have been priced well into satisfactory frames and that there is no urgent concern of the price monitoring. However, being

a fundamental requirement for accurate profitability monitoring and tool for strategic decision-making, as well as detailed cost calculations, a technical pricing process had to be planned beside the operational process. So, the objective of the pricing process in general is not only to monitor the prices, but also to support every level and department involved in the pricing process itself.

All in all, it could be stated that the research reached the objectives that were set for it in the beginning. Actually, it did not only reach the goals but also provided a tool to take it in to use and further develop it, and at the same time, contributing to the academic pricing research by offering sales-specific, tactic, angles in to pricing implementation with strategic orientation. That is, the pricing process should not be seen as having an end at some point: resulting from the dynamic nature of the different markets, global pricing process has to always be adjusted to the purpose of its usage.

6.2 Managerial Implications

The conducted research helps the case company to create the basis for a fundamental and comprehensive profitability monitoring tool. The research did not only present the desired pricing process for the case company, but also the practical tools to use it. These tools were presented as a responsibility form and an extension of the pricing process. Those both indicate, that the researcher has not only planned a process model but also taken into account the dependencies within the different hierarchical teams of the case company.

What is more, the list of the actions needed in implementing the process was presented. This implicates, that it is possible to take the process model to use and that it is planned precisely for the use of the focal case company. This kind of documentation of the process implicates a deep familiarity with the focal case and the operators in it. Needless to state that the interventionist research position functioned well in conducting this kind of a research.

Furthermore, the financial measures implicated, that the detailed cost calculation system and the discount documentation call for deeper examination from the technical point of view, which both can be seen as significant findings and that contribute to tactical planning of the case company. However, when the time evolves and the company does the pricing process research according to the presented action list, daily basic operations become more effective in the company. At the same time the decision-making eases through the key ratios. That is, by the developed monitoring tool, the company will be able to enhance its dealer portfolio analysis and make conclusions about their product shares per market.

All in all, this master's thesis represents the life-cycle of the pricing formation: from the key elements to the pressure of changing some part of the process. The entity of this process was described by short-term actions, by which long-term actions can be achieved. That is why it does not only present a tactic, but also strategically important research for the case company.

6.3 Methodological Overview

In order to assess the success of the research from the limitations point of view, methodological overview is needed. To this purpose, the methodological choices made in Section 3.1 will be deliberated. Hereby, methodological data collection, time horizons, choices, strategies, approaches and philosophies will be discussed from the research point of view.

What comes to data collection and analysis, as said in Section 5.1, the top management points of view were emphasized in this pricing process results, because the supervisor of the research, the CFO, was a representative of the case company's top management. Therefore, other members of the finance department would have been viable to interview. The Coordinators' thoughts on building the key ratios from a system point of view would also have brought interesting insights to the research. Anyway, since the research took into account both, quantitative and qualitative data, and combined those in the analysis as a mixed-method, the research reached the goals of the pricing process. The built pricing process does not only monitor the profitability but also supports the work of the employees in different departments.

Next, longitudinal timeframe, in which the research was conducted affected on the research quality of the results. Because the ultimate goal of the top management is to create a pricing process that supports profitability, it would have been beneficial to verify, how this kind of pricing process really influences the company's profitability. However, this kind of analysis was not possible due to the timeframe of conducting the research, as it lasted only about a half year.

All in all, the interventionist research strategy provided a comprehensive understanding of the pricing process to the researcher, which helped the researcher find the most crucial theories from the literature in the beginning. As said in Section 5.1, when knowing the topic and objectives of the topic while building a control, it is easier to recognize the perspectives that the company really needs. To this purpose, interventionist research methodology functioned well. While using inductivism as an approach to the gathered data, the research will next turn around the pricing process: the key ratios can be used by deductive logic to make strategic decisions in the long-term. Before this research, there was no possibility to use deductivism as a methodology.

However, the interventionist strategy also has some criticism, because the researcher worked in a very subjective position while observing and interviewing. Thus, she had her own interpretation about the topic beforehand, that affected the analysis. The interventionist research position was still recognized and it was analyzed by listing the initial data before starting the intentional data gathering. This helped to observe the information more objectively and to separate the assumptions from the analysis.

The pragmatic approach in the research functioned well for the purpose because the research, as discussed in the previous Section 5.2, represented fundamental modelling of the pricing process and profitability monitoring. Therefore, other philosophies were not even considered for use. What is more, the pragmatic philosophy suited the research also because there was no initial idea, what kind of results the different data analysis would show. Therefore, the decisions of the interviews were made even after the quantitative data analysis. This way, also the reliability of the research was ensured.

6.4 Future Research

In order to create a pragmatic continuation to the master's thesis, a future research discussion needs to be carried out. This is master's thesis presented a framework by combining the theories of pricing process and MCS's packages. Hereby, the potential future research topics derive from these topics as well.

Firstly, as it was noted from the literature review, there does not exist much research on pricing process modelling. Majority of the researches made in the field of pricing process either emphasized quantitative or qualitative research data. Through this research, it was noted that both research data sources are equally important in order to generate a process, which benefits and commits every operator involved in the process. In order to understand both, the internal and the external perspectives on the pricing process, both data types are required to be considered and their impact on the pricing process needs to be reflected more widely in academic literature.

Secondly, in consequence of the above, wider insight is needed to understand the different industries and sizes of companies and their practicalities to manage profitability by pricing. If there would be more research on pricing process models, it would be interesting to study, what is the profitability of these companies and have those profitability levels got higher when the process model has been put to use. In the case company's context then, based on the financial measures, it would be beneficial to study, how the customized cost calculation system could be built to the CRM system of the company. In this research, the technical implementation was only noted as a rough estimate of the categorization structure. Further on, it would be beneficial to examine, how the presented profitability

key ratios evolve after implementing this kind of a pricing process. This way, the results of this master's thesis could be validated.

Lastly, MCS's package also provided interesting aspects to pricing process. By carrying out pricing process research in different companies, like above suggested, it would be possible to recognize, what are the necessary controls to include in a pricing process, when the company is aiming to improve or maintain its profits. In other words, it would be beneficial to examine, could there be some other MCS's packages, including other controls, as well. In the case company's context, the motivation of the Sales Directors was seen as a significant factor when forming the process, which implicated that it is something to take into account when planning the MCS's package for pricing purpose.

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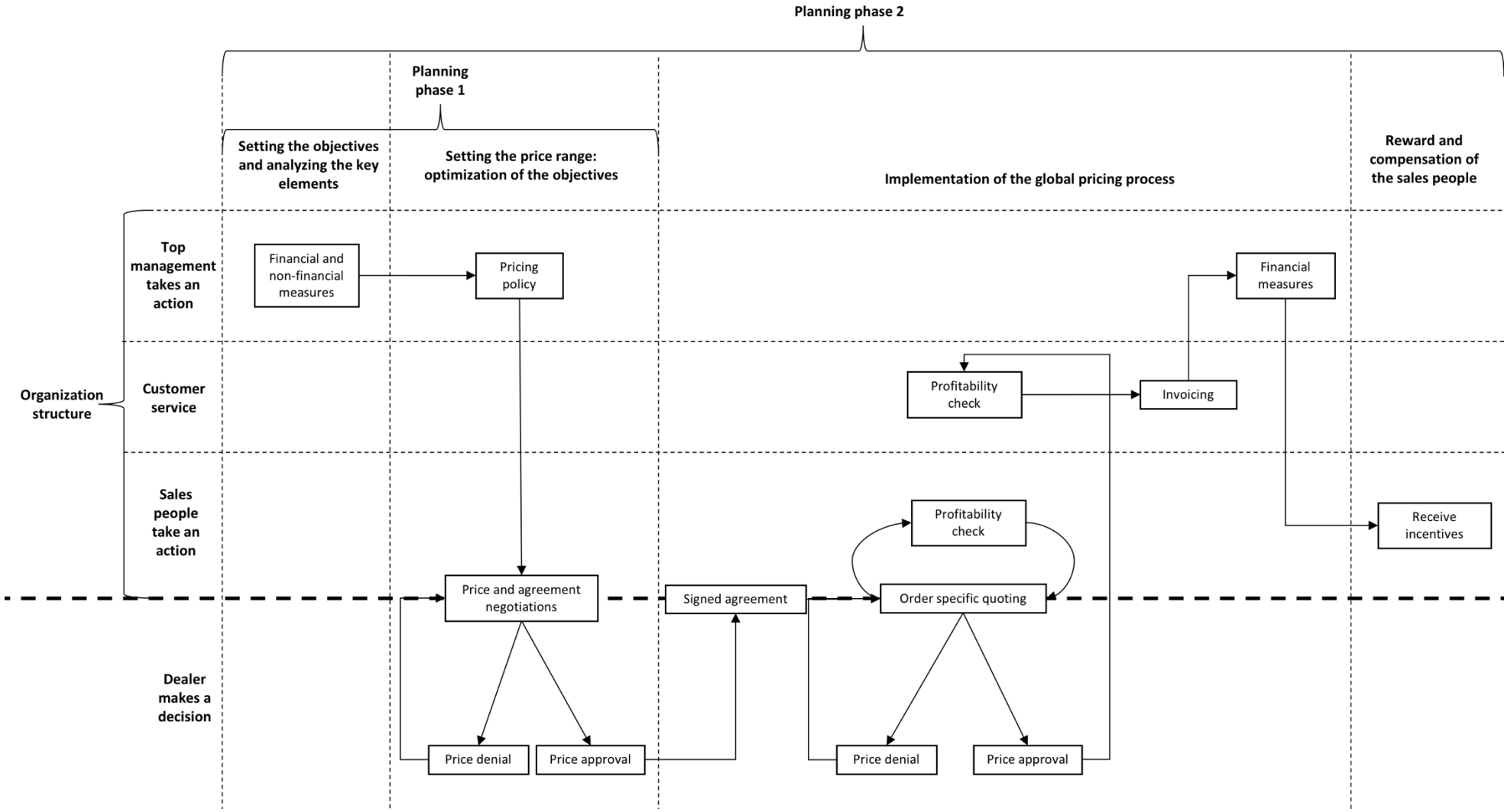
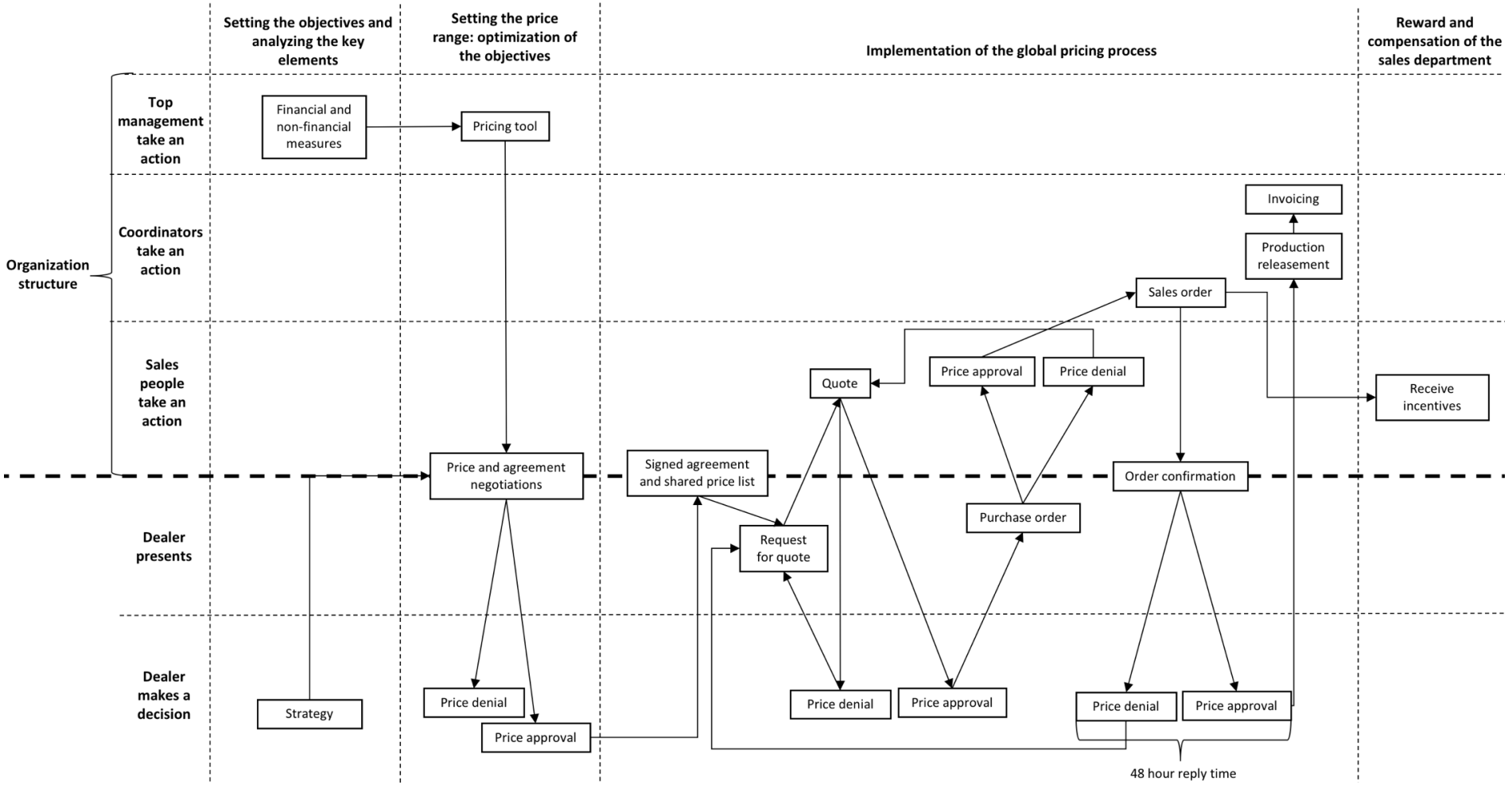
APPENDIX A: PRICING PROCESS IMPLEMENTATION MODEL



APPENDIX B: BASIC PRICING PROCESS MODEL



APPENDIX C: PROJECT-BASED PRICING PROCESS MODEL

The content was removed from the public version of the master's thesis in order to protect the privacy of the case company.

APPENDIX D: CAMPAIGN-BASED PRICING PROCESS MODEL

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APPENDIX E: RESEARCH DIARY

Date	*Participant(s)*	*Purpose of the discussion*	*Topic(s) from the research point of view*	*Characteristics*
2th of Feb	CFO, Head of Sales, Sales Development Manager	Kick-start of the research project (with the supervisor from TUT)	Setting the objectives in the pricing process	Intentional
14th of Feb	Sales Development Manager, Technical Application Specialist	Other project meeting	Marking discounts in the CRM	Unintentional
22th of Feb	CFO	Kick-start of empirical analysis	Quantitative data variables, pricing objectives	Intentional
26th of Feb	Sales Development Manager, Technical Application Specialist, CIO, Head of Sales	Other project meeting	Current stage of the pricing monitoring	Unintentional
5th of March	CFO, Head of Sales, Sales Development Manager	Internal kick-start of the project	Department specific objectives on pricing	Intentional
8th of March	CFO	Regular fortnight meeting	Quantitative data analysis results	Intentional
14th of March	Sales Director of Market B	Discussion about the prices	Customer value, competition	Unintentional
15th of March	Entire Sales department (Head of Sales and Sales Directors, Sales Development Manager)	Presentation of the quantitative analysis	Quantitative data analysis results and price deviations	Intentional
21th of March	Sales Development Manager, Business Analyst, Technical Application Specialist	Other project meeting	Technical implementation of the prices	Unintentional
22th of March	CFO	Regular fortnight meeting	Quantitative data analysis	Intentional
28th of March	Business Analyst	Coding of the standard products	Technical implementation of the prices	Intentional
4th of April	CFO	Regular fortnight meeting	Quantitative data analysis	Intentional
6th of April	Sales Development Manager	Other project meeting	Discounts marking in the CRM	Unintentional

13th of April	Sales Development Manager	Other project meeting	Discounts marking in the CRM	Unintentional
16th of April	Sales Director 3	Semi-structured interview	Pricing induction, price negotiations, pricing process	Intentional
16th of April	Sales Director 4	Semi-structured interview	Pricing induction, price negotiations, pricing process	Intentional
19th of April	CFO, Sales Development Manager, Head of Sales	Regular fortnight meeting	Quantitative and qualitative data analysis	Intentional
19th of April	Sales Director 1	Semi-structured interview	Pricing induction, price negotiations, pricing process	Intentional
23th of April	Sales Director 2	Semi-structured interview	Pricing induction, price negotiations, pricing process	Intentional
25th of April	Head of Sales	Semi-structured interview	Management perspective: Pricing induction, price negotiations, pricing process	Intentional
4th of May	CFO, Sales Development Manager, Head of Sales	Regular fortnight meeting	Quantitative and qualitative data analysis results	Intentional
18th of May	CFO, Sales Development Manager, Head of Sales	Regular fortnight meeting	Quantitative and qualitative data analysis results	Intentional
24th of May	Sales Development Manager, Customer Service and Delivery Director	Validation of the drawn pricing process models	Pricing process implementation	Intentional
30th of May	Technical Application Specialist	Current pricing process check-up from technical point of view	Pricing monitoring	Intentional
1st of June	CFO, Sales Development Manager	Regular fortnight meeting	Action list of the enhanced pricing process	Intentional
18th of June	Sales Development Manager	Regular fortnight meeting	Action list of the enhanced pricing process	Intentional
26th of June	Sales Development Manager, CFO, Head of Sales	Project wrap-up	Overall results and solution proposal as an entity	Intentional

APPENDIX F: INTERVIEW STRUCTURES

Sales Directors

Induction for the pricing

1. What kind of induction have you had to pricing? When?
2. Have you received any extra induction or guidance to pricing?
3. Do think you would have needed extra induction to pricing?
4. Have you ever inducted others to pricing?

Price list and agreements

1. Do you share the price list with your dealers?
2. Do you think that the dealers are able to use the price list?
3. Do the majority of your dealers have an agreement?
    - If not, why?
    - Are there any common reasons why dealers reject an agreement?
4. How do you prepare yourself for the pricing negotiations?

Pricing process

1. How do you price the products?
2. Can you identify different kinds of pricing situations where the pricing does not follow the same logic?
    - What are these different pricing situations?
3. What is the most common pricing situation from your previously mentioned situations?
4. How the dealer discount is formed?
5. How do you give volume discounts?
6. In your opinion, can your dealers price the products by themselves correctly or do you mark it by on the purchase order yourself?
7. In your opinion, can the coordinators price the products correctly if needed?
8. Do your dealers ever question the prices in the pricing process?
    - If yes, in which part of the pricing process?
9. Do the coordinators ever question the prices in the pricing process?
    - If yes, in which part of the pricing process?
10. How often do you feel that the price is a critical factor when closing the deal?
11. What are the benefits of the current pricing process model?
12. What are the disadvantages of the current pricing process model?
    - What would you improve in the current pricing process?
13. Can you identify clear motivational aspects in the current pricing process?
    - How does it affect your motivation to sell?
14. Do you feel that the organization structure and supply chain support your sales work?
15. To what kind of pricing situations do you need support from your foreman?
16. How many times in a year you have asked for pricing support from your foreman?

17. Do you think that you would need more support from your foreman in the sales work?
18. Are there any cultural aspects in the current pricing model that affect your sales work?

Head of Sales

Pricing induction

1. Who have you inducted on pricing?
2. Have you given the same induction for everyone?
3. What kind of instructions have you given to pricing?

Price range: Management points of view

4. Do you consider the Sales Directors to be following the pricing policy correctly?
5. Do you trust the Sales Directors when it comes to following the pricing limits?
6. Would you be ready to fix the price range?
7. Do you see that there is a need to fix the price range?

Pricing implementation: Management points of view

8. Have you monitored the pricing in any way by so far?
9. Would you like to monitor the pricing? How?
10. What are the advantages in the current pricing process?
11. What are the weaknesses in the current pricing process?
12. How does an ideal pricing process work?
13. What expectations do you have for the solution of this research project?
14. How the organizational structure affect the pricing process flow?
15. How often do you discuss the prices with the Sales Directors?
16. How do recruitments affect the pricing process?

APPENDIX G: SALES DIRECTOR-SPECIFIC COMPARATIVE ANALYSIS

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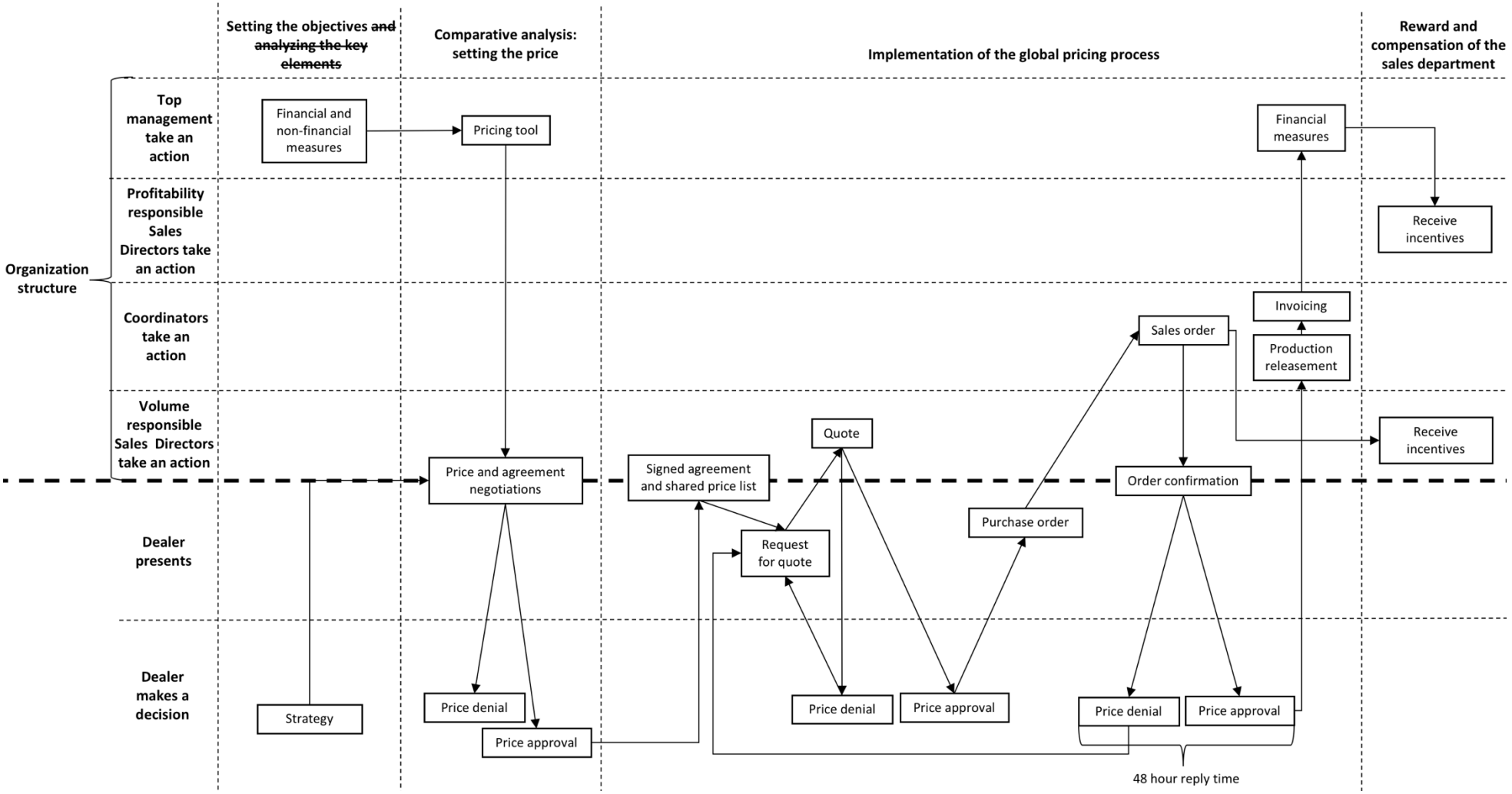
APPENDIX H: ENHANCED BASIC PRICING PROCESS MODEL



APPENDIX I: ENHANCED PROJECT-BASED PRICING PROCESS MODEL

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APPENDIX J: ENHANCED CAMPAIGN-BASED PRICING PROCESS MODEL

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APPENDIX K: ACTION LIST

The content was removed from the public version of the master's thesis in order to protect the privacy of the case company.

APPENDIX L: COORDINATORS' CHECKPOINT IN MORE DETAIL

The content was removed from the public version of the master's thesis in order to protect the privacy of the case company.

APPENDIX M: RESPONSIBILITY FORM

The content was removed from the public version of the master's thesis in order to protect the privacy of the case company.